

10/537121

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SEQUENCE LISTING

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<120> Compositions, Splice Variants and Methods Relating to Colon
Specific Genes and Proteins

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 <212> DNA
 <213> Homo sapien

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 <211> 1869
 <212> DNA
 <213> Homo sapien

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 <212> DNA
 <213> Homo sapien

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34

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64

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82

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83

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84

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95

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97

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98

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99

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103

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104

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105

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108

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109

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<210> 66
 <211> 1414
 <212> DNA
 <213> Homo sapien

<400> 66
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 tgaagtcctt gccttggaat aagcccatag cccatcccat aatttgatgc ctgtattact 180

111

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<210> 67
<211> 1243
<212> DNA
<213> Homo sapien

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<400> 67
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gagcgtcggg cccatggagg gaaggcggca ggggaacctg tccagcgatg atgccaatgt 180
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112

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 tccggagctg ttcagaaaga atgccgaaga gttcacctc cgattcggag tggaccggcc 540
 ctctaactc atgttctgac cctctgtgca ctggatcctc ggcatagcgg acggacacac 600
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<210> 68
 <211> 1507
 <212> DNA
 <213> Homo sapien

<400> 68
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 gcctcccatg atcaaattca caaccaagat ctaccacccc aacgtggacg agaacggaca 600
 gatttgcttg cccatcatca gcagtgagaa ctggaagcct tgcaccaaga cttgccaagt 660
 cctggaggcc ctcaatgtgc tggatgaatag accgaatatc agggagcccc tgcggatgga 720

113

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 agatgaa 1507

<210> 69
 <211> 1279
 <212> DNA
 <213> Homo sapien

<400> 69
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114

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tcttgacggg taagaaacat ccattcttct caattcccca gcgttttccc cctaccggaa      960
atctgatggg cttatgacat catggctggc tgctgagcga tgaagtggat gccacaaaga     1020
aatccgacat atcagataga ttctgaaatc ggtttccctc cagctgtagt aacaggcgtg     1080
aagtcaggag aatttgagct ttgtttaaaa aataaataaa taaataaata aaccataaca     1140
aagtcttgcc ctgtattaaa tgcaattttc ttaaaaacaa gcaaaccttt tggacatcat     1200
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agctttgtgt gagtgttcc                                     1279

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<210> 70
 <211> 517
 <212> DNA
 <213> Homo sapien

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<400> 70
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caaaatgtgt gagagaagcg gctgcgagc cccgacggga gcgtgagggg gcgggccagc     180
gttttcccc taccggaaat ctgatgggct tatgacatca tggctggctg ctgagcgatg     240
aagtggatgc cacaaagaaa tccgacatat cagatagatt ctgaaatcgg tttccctcca     300
gctgtagtaa caggcgtgaa gtcaggagaa tttgagcttt gtttaaaaaa taaataaata     360
aataaataaa ccataacaaa gtcttgccct gtattaaatg caattttctt aaaaacaagc     420
aaaccttttg gacatcattt tattttaata gaaatgctga gttttatgaa actaaagtgg     480
ctaataaatc agacctgaag ctttgcgtga gtgttcc                                     517

```

<210> 71
 <211> 736
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (46)..(46)
 <223> n=a, c, g or t

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<400> 71
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115

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ctggagccca acgaggttcg gctggagcag cagagcgtgc cagccgcagt gtttgggagc 660
ctgaaggaag actgaccogt ccctccccc tccccctcc ccacccctc cccaatacag 720
ctacgtttgt acatca 736

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<210> 72
<211> 3041
<212> DNA
<213> Homo sapien

```

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<400> 72
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cacactacac ccacaaacca actctggaat acagtccctt tcccatacct cccagctccc 180
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116

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117

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 atggttttaa ataaactaat tcactaatat tatttgtctt a 3041

<210> 73
 <211> 1193
 <212> DNA
 <213> Homo sapien

<400> 73
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<210> 74
 <211> 1725
 <212> DNA
 <213> Homo sapien

<400> 74
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119

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120

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121

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 <212> DNA
 <213> Homo sapien

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122

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<211> 1648

<212> DNA

<213> Homo sapien

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123

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<211> 2595
<212> DNA
<213> Homo sapien

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125

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 <211> 1706
 <212> DNA
 <213> Homo sapien

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126

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<210> 83

<211> 2567

<212> DNA

<213> Homo sapien

<400> 83

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127

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 <212> DNA
 <213> Homo sapien

<400> 84

128

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 <211> 2800
 <212> DNA
 <213> Homo sapien

<400> 85
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<210> 86
 <211> 717
 <212> DNA
 <213> Homo sapien

<400> 86
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<210> 87
 <211> 1098
 <212> DNA
 <213> Homo sapien

<400> 87
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132

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ttcacgggtt cattacca                                     1098

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<210> 88
<211> 731
<212> DNA
<213> Homo sapien

<220>
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<222> (21)..(21)
<223> n=a, c, g or t

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ataaattttc atgggtgggg tagatgcaaa aaaaaaagaa ttcgaattcg aattcggaac    180
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gcaataaatg ttctggtttt aaaaaatata tatctggttt tggtaaggta tttttaatca    540
attaggcttg tagtatcagt gaaatactgt aggtttaggg actgggctag cttcatatca    600
gatttacttg ttaagtgact gttttggaat gtttactttt ggactgggtt tgtaacacgg    660
ttaaaggcaa tgagaaacaa gcagaattcc aggagtcctt gaagcagagg gcactggaag    720
acaatatagc a                                           731

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133

<210> 89
 <211> 777
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (50)..(50)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (90)..(90)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (199)..(199)
 <223> n=a, c, g or t

<220>
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 <222> (201)..(201)
 <223> n=a, c, g or t

<220>
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 <222> (204)..(204)
 <223> n=a, c, g or t

<220>
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 <222> (206)..(206)
 <223> n=a, c, g or t

<400> 89
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134

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<210> 90
 <211> 564
 <212> DNA
 <213> Homo sapien

<400> 90	
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<210> 91
 <211> 540
 <212> DNA
 <213> Homo sapien

<400> 91	
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taagtgactg ttttggaatg tttacttttg gactgggttt gtaacacggg taaaggcaat	480
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135

<210> 92
 <211> 1103
 <212> DNA
 <213> Homo sapien

<400> 92
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<210> 93
 <211> 398
 <212> DNA
 <213> Homo sapien

<400> 93
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 aagagccagg atatctacct gaggctgttg gtcaagttat acaggtttct ggccagaaga 180
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136

acggccgtgg ttgtggggac cataactgat gatgtgcggg ttcaggaggt acccaaactg 350
 atcggccgcg accacgctaa gccggattcc agcacact 398

<210> 94
 <211> 1673
 <212> DNA
 <213> Homo sapien

<400> 94
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144

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 <211> 450
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 <213> Homo sapien

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145

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<210> 102

<211> 1193

146

<212> DNA

<213> Homo sapien

<400> 102

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<210> 103

<211> 1685

<212> DNA

<213> Homo sapien

<400> 103

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147

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<211> 1182
<212> DNA
<213> Homo sapien

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148

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<211> 2645

<212> DNA

<213> Homo sapien

<400> 105

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149

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150

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 <211> 2439
 <212> DNA
 <213> Homo sapien

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151

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 <211> 1958
 <212> DNA
 <213> Homo sapien

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152

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<211> 3400

<212> DNA

<213> Homo sapien

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154

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<211> 2775

<212> DNA

<213> Homo sapien

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155

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156

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158

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<211> 1887
<212> DNA
<213> Homo sapien

<400> 111
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<210> 112
<211> 4041
<212> DNA
<213> Homo sapien

<400> 112
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aacaagagcg ccaagaagag ggagggcgag cttacggctg cccagggccg tgtgaaggac 480
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161

ggccgcagta agcggaagcg gctggagggtg gaggagccct tgggcagcgg cccaagcgtc 1380
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162

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ccaataaaca ttttgatttt a 4041

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<210> 113
 <211> 165
 <212> FRT
 <213> Homo sapien

<400> 113

Gly Gly Arg Asn Arg Gly Arg Ala Gly Ser Gln Gly Gly Arg Gly Gly
 1 5 10 15

Gly Ala Gln Ala Ala Ala Arg Val Asn Arg Gly Gly Gly Pro Ile Arg
 20 25 30

Asn Arg Pro Ala Ile Ala Arg Gly Ala Ala Gly Gly Gly Gly Arg Asn
 35 40 45

Arg Pro Ala Pro Tyr Ser Arg Pro Lys Gln Leu Pro Asp Lys Trp Gln
 50 55 60

His Asp Leu Phe Asp Ser Gly Phe Gly Gly Gly Ala Gly Val Glu Thr
 65 70 75 80

Gly Gly Lys Leu Leu Val Ser Asn Leu Asp Phe Gly Val Ser Asp Ala

163

85

90

95

Asp Ile Gln Glu Leu Phe Ala Glu Phe Gly Thr Leu Lys Lys Ala Ala
 100 105 110

Val His Tyr Asp Arg Ser Gly Arg Ser Leu Gly Thr Ala Asp Val His
 115 120 125

Phe Glu Arg Lys Ala Asp Ala Leu Lys Ala Met Lys Gln Tyr Asn Gly
 130 135 140

Val Pro Leu Asp Ala Ser Tyr Ile Pro Pro Leu Leu Gln Leu Leu Pro
 145 150 155 160

Glu Asp Ser Leu Leu
 165

<210> 114
 <211> 164
 <212> PRT
 <213> Homo sapien
 <220>
 <221> MISC_FEATURE
 <222> (4)..(4)
 <223> X=any amino acid

<400> 114

Gly Ala Gly Xaa Ala Pro Gly Arg Leu Gln Gly Gly Arg Gly Gly Gly
 1 5 10 15

Ala Gln Ala Ala Ala Arg Val Asn Arg Gly Gly Gly Pro Ile Arg Asn
 20 25 30

Arg Pro Ala Ile Ala Arg Gly Ala Ala Gly Gly Gly Gly Arg Asn Arg
 35 40 45

Pro Ala Pro Tyr Ser Arg Pro Lys Gln Leu Pro Asp Lys Trp Gln His
 50 55 60

Asp Leu Phe Asp Ser Gly Phe Gly Gly Gly Ala Gly Val Glu Thr Gly
 65 70 75 80

Gly Lys Leu Leu Val Ser Asn Leu Asp Phe Gly Val Ser Asp Ala Asp
 85 90 95

Ile Gln Glu Leu Phe Ala Glu Phe Gly Thr Leu Lys Lys Ala Ala Val

164

100

105

110

His Tyr Asp Arg Ser Gly Arg Ser Leu Gly Thr Ala Asp Val His Phe
 115 120 125

Glu Arg Lys Ala Asp Ala Leu Lys Ala Met Lys Gln Tyr Asn Gly Val
 130 135 140

Pro Leu Asp Ala Ser Tyr Ile Pro Pro Leu Leu Gln Leu Leu Pro Glu
 145 150 155 160

Asp Ser Leu Leu

<210> 115
 <211> 256
 <212> PRT
 <213> Homo sapien

<400> 115

Met Ala Leu Arg Val Thr Arg Asn Ser Lys Ile Asn Ala Glu Asn Lys
 1 5 10 15

Ala Lys Ile Asn Met Ala Gly Ala Lys Arg Val Pro Thr Ala Pro Ala
 20 25 30

Ala Thr Ser Lys Pro Gly Leu Arg Pro Arg Thr Ala Leu Gly Asp Ile
 35 40 45

Gly Asn Lys Val Ser Glu Gln Leu Gln Ala Lys Met Pro Met Lys Lys
 50 55 60

Glu Ala Lys Pro Ser Ala Thr Gly Lys Val Ile Asp Lys Lys Leu Pro
 65 70 75 80

Lys Pro Leu Glu Lys Val Pro Met Leu Val Pro Val Pro Val Ser Glu
 85 90 95

Pro Val Pro Glu Pro Glu Pro Glu Pro Glu Pro Glu Pro Val Lys Glu
 100 105 110

Glu Lys Leu Ser Pro Glu Pro Ile Leu Val Asp Thr Ala Ser Pro Ser
 115 120 125

Pro Met Glu Thr Ser Gly Cys Ala Pro Ala Glu Glu Asp Leu Cys Gln
 130 135 140

165

Ala Phe Ser Asp Val Ile Leu Ala Val Asn Asp Val Asp Ala Glu Asp
 145 150 155 160

Gly Ala Asp Pro Asn Leu Cys Ser Glu Tyr Val Lys Asp Ile Tyr Ala
 165 170 175

Tyr Leu Arg Gln Leu Glu Glu Glu Gln Ala Val Arg Pro Lys Tyr Leu
 180 185 190

Leu Gly Arg Glu Val Thr Gly Asn Met Arg Ala Ile Leu Ile Asp Trp
 195 200 205

Leu Val Gln Val Gln Met Lys Ser Val Cys Ala Gly Pro Val Cys Gly
 210 215 220

Pro Ile Asp Gly Pro Ala Lys Leu Gly Ala Gln Ile Ala Gly Gly Pro
 225 230 235 240

Ala Val Trp Pro Leu Lys Gly Pro Arg Gly Arg Trp Gly Thr Leu Ala
 245 250 255

<210> 116
 <211> 250
 <212> PRT
 <213> Homo sapien

<400> 116

Ala Gly Ser Ser Arg Arg Ala Ala Ala Glu Arg Leu Leu Val Ser Ala
 1 5 10 15

Gly Cys Arg Ser Leu Ala Gly Arg Ala Ser Gly Val Leu Leu Leu Pro
 20 25 30

Ala Glu Leu Leu Pro Gly Glu Glu Glu Ala Met Ala Leu Arg Val Thr
 35 40 45

Arg Asn Ser Lys Ile Asn Ala Glu Asn Lys Ala Lys Ile Asn Met Ala
 50 55 60

Gly Ala Lys Arg Val Pro Thr Ala Pro Ala Ala Thr Ser Lys Pro Gly
 65 70 75 80

Leu Arg Pro Arg Thr Ala Leu Gly Asp Ile Gly Asn Lys Val Ser Glu
 85 90 95

Gln Leu Gln Ala Lys Met Pro Met Lys Lys Glu Ala Lys Pro Ser Ala

166

100	105	110
Thr Gly Lys Val Ile Asp Lys Lys Leu Pro Lys Pro Leu Glu Lys Val		
115	120	125
Pro Met Leu Val Pro Val Pro Val Ser Glu Pro Val Pro Glu Pro Glu		
130	135	140
Pro Glu Pro Glu Pro Glu Pro Val Lys Glu Glu Lys Leu Ser Pro Glu		
145	150	155
Pro Ile Leu Val Asp Thr Ala Ser Pro Ser Pro Met Glu Thr Ser Gly		
165	170	175
Cys Ala Pro Ala Glu Glu Asp Leu Cys Gln Ala Phe Ser Asp Val Ile		
180	185	190
Leu Ala Val Asn Asp Val Asp Ala Glu Asp Gly Ala Asp Pro Asn Leu		
195	200	205
Cys Ser Glu Tyr Val Lys Asp Ile Tyr Ala Tyr Leu Arg Gln Leu Glu		
210	215	220
Glu Glu Gln Ala Val Arg Pro Lys Tyr Leu Leu Gly Arg Glu Val Thr		
225	230	235
Gly Asn Met Arg Ala Ile Leu Ile Asp Trp		
245	250	

<210> 117
 <211> 406
 <212> PRT
 <213> Homo sapien

<400> 117

Met Glu Ala Ala Ala Val Thr Val Thr Arg Ser Ala Thr Arg Arg Arg		
1	5	10
Arg Arg Gln Leu Gln Gly Leu Ala Ala Pro Glu Ala Gly Thr Gln Glu		
20	25	30
Glu Gln Glu Asp Gln Glu Pro Arg Pro Arg Arg Arg Pro Gly Arg		
35	40	45
Ser Ile Lys Asp Glu Glu Glu Glu Thr Val Phe Arg Glu Val Val Ser		
50	55	60

167

Phe	Ser	Pro	Asp	Pro	Leu	Pro	Val	Arg	Tyr	Tyr	Asp	Lys	Asp	Thr	Thr	65	70	75	80
Lys	Pro	Ile	Ser	Phe	Tyr	Leu	Ser	Ser	Leu	Glu	Glu	Leu	Leu	Ala	Trp	85	90	95	
Lys	Pro	Arg	Leu	Glu	Asp	Gly	Phe	Asn	Val	Ala	Leu	Glu	Pro	Leu	Ala	100	105	110	
Cys	Arg	Gln	Pro	Pro	Leu	Ser	Ser	Gln	Arg	Pro	Arg	Thr	Leu	Leu	Cys	115	120	125	
His	Asp	Met	Met	Gly	Gly	Tyr	Leu	Asp	Asp	Arg	Phe	Ile	Gln	Gly	Ser	130	135	140	
Val	Val	Gln	Thr	Pro	Tyr	Ala	Phe	Tyr	His	Trp	Gln	Cys	Ile	Asp	Val	145	150	155	160
Phe	Val	Tyr	Phe	Ser	His	His	Thr	Val	Thr	Ile	Pro	Pro	Val	Gly	Trp	165	170	175	
Thr	Asn	Thr	Ala	His	Arg	His	Gly	Val	Cys	Val	Leu	Gly	Thr	Phe	Ile	180	185	190	
Thr	Glu	Trp	Asn	Glu	Gly	Gly	Arg	Leu	Cys	Glu	Ala	Phe	Leu	Ala	Gly	195	200	205	
Asp	Glu	Arg	Ser	Tyr	Gln	Ala	Val	Ala	Asp	Arg	Leu	Val	Gln	Ile	Thr	210	215	220	
Gln	Phe	Phe	Arg	Phe	Asp	Gly	Trp	Leu	Ile	Asn	Ile	Glu	Asn	Ser	Leu	225	230	235	240
Ser	Leu	Ala	Ala	Val	Gly	Asn	Met	Pro	Pro	Phe	Leu	Arg	Tyr	Leu	Thr	245	250	255	
Thr	Gln	Leu	His	Arg	Gln	Val	Pro	Gly	Gly	Leu	Val	Leu	Trp	Tyr	Asp	260	265	270	
Ser	Val	Val	Gln	Ser	Gly	Gln	Leu	Lys	Trp	Gln	Asp	Glu	Leu	Asn	Gln	275	280	285	
His	Asn	Arg	Val	Phe	Phe	Asp	Ser	Cys	Asp	Gly	Phe	Phe	Thr	Asn	Tyr	290	295	300	

168

Asn Trp Arg Glu Glu His Leu Glu Arg Met Leu Gly Gln Ala Gly Glu
 305 310 315 320

Arg Arg Ala Asp Val Tyr Val Gly Val Asp Val Phe Ala Arg Gly Asn
 325 330 335

Val Val Gly Gly Arg Phe Asp Thr Asp Lys Val Gly Gly Gly Phe Arg
 340 345 350

Pro Arg Ala Ser Gly Pro Val Pro Pro Leu Gly Pro His Phe Leu Met
 355 360 365

Asp Leu Pro Phe Pro Ser Ala Pro Gln Arg Asn Asp Ser Ser Cys Ser
 370 375 380

Ser Gln Ser Gly Asp Pro Val Ala Leu Arg Asn Arg Cys Pro Ala Pro
 385 390 395 400

Ala Lys Leu Cys Pro His
 405

<210> 118
 <211> 525
 <212> PRT
 <213> Homo sapien

<400> 118

Met Glu Ala Ala Ala Val Thr Val Thr Arg Ser Ala Thr Arg Arg Arg
 1 5 10 15

Arg Arg Gln Leu Gln Gly Leu Ala Ala Pro Glu Ala Gly Thr Gln Glu
 20 25 30

Glu Gln Glu Asp Gln Glu Pro Arg Pro Arg Arg Arg Pro Gly Arg
 35 40 45

Ser Ile Lys Asp Glu Glu Glu Glu Thr Val Phe Arg Glu Val Val Ser
 50 55 60

Phe Ser Pro Asp Pro Leu Pro Val Arg Tyr Tyr Asp Lys Asp Thr Thr
 65 70 75 80

Lys Pro Ile Ser Phe Tyr Leu Ser Ser Leu Glu Glu Leu Leu Ala Trp
 85 90 95

Lys Pro Arg Leu Glu Asp Gly Phe Asn Val Ala Leu Glu Pro Leu Ala
 100 105 110

169

Cys Arg Gln Pro Pro Leu Ser Ser Gln Arg Pro Arg Thr Leu Leu Cys
 115 120 125

His Asp Met Met Gly Gly Tyr Leu Asp Asp Arg Phe Ile Gln Gly Ser
 130 135 140

Val Val Gln Thr Pro Tyr Ala Phe Tyr His Trp Gln Cys Ile Asp Val
 145 150 155 160

Phe Val Tyr Phe Ser His His Thr Val Thr Ile Pro Pro Val Gly Trp
 165 170 175

Thr Asn Thr Ala His Arg His Gly Val Cys Val Leu Gly Thr Phe Ile
 180 185 190

Thr Glu Trp Asn Glu Gly Gly Arg Leu Cys Glu Ala Phe Leu Ala Gly
 195 200 205

Asp Glu Arg Ser Tyr Gln Ala Val Ala Asp Arg Leu Val Gln Ile Thr
 210 215 220

Gln Phe Phe Arg Phe Asp Gly Trp Leu Ile Asn Ile Glu Asn Ser Leu
 225 230 235 240

Ser Leu Ala Ala Val Gly Asn Met Pro Pro Phe Leu Arg Tyr Leu Thr
 245 250 255

Thr Gln Leu His Arg Gln Val Pro Gly Gly Leu Val Leu Trp Tyr Asp
 260 265 270

Ser Val Val Gln Ser Gly Gln Leu Lys Trp Gln Asp Glu Leu Asn Gln
 275 280 285

His Asn Arg Val Phe Phe Asp Ser Cys Asp Gly Phe Phe Thr Asn Tyr
 290 295 300

Asn Trp Arg Glu Glu His Leu Glu Arg Met Leu Gly Gln Ala Gly Glu
 305 310 315 320

Arg Arg Ala Asp Val Tyr Val Gly Val Asp Val Phe Ala Arg Gly Asn
 325 330 335

Val Val Gly Gly Arg Phe Asp Thr Asp Lys Ser Leu Glu Leu Ile Arg
 340 345 350

170

Lys His Gly Phe Ser Val Ala Leu Phe Ala Pro Gly Trp Val Tyr Glu
 355 360 365

Cys Leu Glu Lys Lys Asp Phe Phe Gln Asn Gln Asp Lys Phe Trp Gly
 370 375 380

Arg Leu Glu Arg Tyr Leu Pro Thr His Ser Ile Cys Ser Leu Pro Phe
 385 390 395 400

Val Thr Ser Phe Cys Leu Gly Met Gly Ala Arg Arg Val Cys Tyr Gly
 405 410 415

Gln Glu Glu Ala Val Gly Pro Trp Tyr His Leu Ser Ala Gln Glu Ile
 420 425 430

Gln Pro Leu Phe Gly Glu His Arg Leu Gly Gly Asp Gly Arg Gly Trp
 435 440 445

Val Arg Thr His Cys Cys Leu Glu Asp Ala Trp His Gly Gly Ser Ser
 450 455 460

Leu Leu Val Arg Gly Val Ile Pro Pro Glu Val Gly Asn Val Ala Val
 465 470 475 480

Arg Trp Val Ser Asp Gly Gly Arg Trp Ala His Gln Leu Leu Pro Ser
 485 490 495

His Val Val Ala Met Glu Leu Asp Arg Trp Gly Ser Gly Gly Gln Asn
 500 505 510

Lys Asp Arg Gly Gln Thr Gln Met Gly Phe Leu Lys Leu
 515 520 525

<210> 119

<211> 327

<212> PRT

<213> Homo sapien

<400> 119

Met Phe Gln Pro Thr Lys Glu Ser Gly Leu Gly Gly Gly Leu Val Pro
 1 5 10 15

Trp Leu Arg Thr Gly Pro Arg Cys Gly Ser Ile Trp His Pro Gly Pro
 20 25 30

Leu Phe Leu Glu Gly Gly Ala Gly Gly Arg Asp Leu Glu Leu Ala Ser

171

35

40

45

Ile Ser Gln Trp Ser Leu His Gly Thr His His Arg Thr Phe Phe Pro
 50 55 60

Arg Leu Phe Ser Leu Gln Ala Pro Val Pro Pro Lys Ile Tyr Leu Ser
 65 70 75 80

Met Val Tyr Lys Leu Glu Gly Pro Thr Asp Val Thr Val Ala Leu Glu
 85 90 95

Leu Thr Thr Gly Asp Ala Gly Ser Cys His Ile Gly Gly Ile Ser Val
 100 105 110

Leu Asn Ala Glu Thr Ser Ser Arg His Ser Leu Arg Pro Leu Arg Val
 115 120 125

Pro Pro Thr Lys Leu Ala Arg Trp Val Gly Arg Cys Gly Arg Gln Leu
 130 135 140

Ser Gly Gly Trp Val Gln His Cys Tyr Glu Val Ser Leu Arg Gly Cys
 145 150 155 160

Leu Leu Leu Asp Leu Leu Val Cys Phe Ser Arg Pro Pro Gly Ser Arg
 165 170 175

Glu Glu Glu Ser Phe Thr Cys Arg Leu Gly Glu Ile Gln Val Val Asp
 180 185 190

Ala Ala Ser Leu Leu Ala Pro Leu Pro Gln Val Gln Ala Val Thr Ile
 195 200 205

Ser His Ile Arg Trp Gln Pro Ser Ala Ser Glu Arg Glu Gly Pro Pro
 210 215 220

Ala Leu Leu Gln Leu Ser Cys Thr Leu His Trp Ser Phe Leu Leu Ser
 225 230 235 240

Gln Val Arg Cys Phe Arg Ile His Cys Trp Gly Gly Met Ser Asp Asp
 245 250 255

Ser Pro Gly Arg Glu Leu Pro Arg Pro Glu Met Pro Met Phe Leu Gly
 260 265 270

Leu Ala Phe Ala Thr Gln Tyr Arg Ile Val Asp Leu Leu Val Glu Ala
 275 280 285

172

Ala Gly Pro Gly Gln Asp Arg Arg Met Glu Phe Leu Val Glu Pro Val
 290 295 300

Pro Lys Glu Gly Phe Arg Val Pro Gln Ala Glu Trp Gly Arg Ala Val
 305 310 315 320

Leu Leu Tyr Ser Ala Pro Ala
 325

<210> 120
 <211> 384
 <212> PRT
 <213> Homo sapien

<400> 120

Gln Ile Pro Arg Thr Val Ser Ser Cys Arg Thr Gly Leu Ser Pro Leu
 1 5 10 15

His Ile Ser Pro Pro Ser Ser Pro Ser Pro Pro Lys Pro Pro Leu Tyr
 20 25 30

Ser Ala Ser Val Ser Leu Asp Thr Leu Asp Ala Pro Tyr Glu Gly Ile
 35 40 45

Pro Tyr Gly Ile Ser Glu Leu Arg Cys Phe Ser Pro Gln Lys Asn Leu
 50 55 60

Ala Leu Gly Glu Asp Leu Ser Pro Gly Tyr Gly Gln Asp His Asp Val
 65 70 75 80

Gly Ala Phe Gly Thr Gln Ala Pro Cys Ser Trp Arg Glu Gly Leu Val
 85 90 95

Asp Ala Ile Trp Ser Trp Leu Arg Phe Leu Ser Gly Leu Ser Thr Ala
 100 105 110

Pro Ile Thr Gly Pro Phe Ser Pro Gly Tyr Phe Tyr Ser Leu Gln Ala
 115 120 125

Pro Val Pro Pro Lys Ile Tyr Leu Ser Met Val Tyr Lys Leu Glu Gly
 130 135 140

Pro Thr Asp Val Thr Val Ala Leu Glu Leu Thr Thr Gly Asp Ala Gly
 145 150 155 160

173

Ser Cys His Ile Gly Gly Ile Ser Val Leu Asn Ala Glu Thr Ser Ser
 165 170 175

Arg His Ser Leu Arg Pro Leu Arg Val Pro Pro Thr Lys Leu Ala Arg
 180 185 190

Trp Val Gly Arg Cys Gly Arg Gln Leu Ser Gly Gly Trp Val Gln His
 195 200 205

Cys Tyr Glu Val Ser Leu Arg Gly Cys Leu Leu Leu Asp Leu Leu Val
 210 215 220

Cys Phe Ser Arg Pro Pro Gly Ser Arg Glu Glu Glu Ser Phe Thr Cys
 225 230 235 240

Arg Leu Gly Glu Ile Gln Val Val Asp Ala Ala Ser Leu Leu Ala Pro
 245 250 255

Leu Pro Gln Val Gln Ala Val Thr Ile Ser His Ile Arg Trp Gln Pro
 260 265 270

Ser Ala Ser Glu Arg Glu Gly Pro Pro Ala Leu Leu Gln Leu Ser Cys
 275 280 285

Thr Leu His Trp Ser Phe Leu Leu Ser Gln Val Arg Cys Phe Arg Ile
 290 295 300

His Cys Trp Gly Gly Met Ser Asp Asp Ser Pro Gly Arg Glu Leu Pro
 305 310 315 320

Arg Pro Glu Met Pro Met Phe Leu Gly Leu Ala Phe Ala Thr Gln Tyr
 325 330 335

Arg Ile Val Asp Leu Leu Val Glu Ala Ala Gly Pro Gly Gln Asp Arg
 340 345 350

Arg Met Glu Phe Leu Val Glu Pro Val Pro Lys Glu Gly Phe Arg Val
 355 360 365

Pro Gln Ala Glu Trp Gly Arg Ala Val Leu Leu Tyr Ser Ala Pro Ala
 370 375 380

<210> 121
 <211> 450
 <212> PRT
 <213> Homo sapien

174

<400> 121

Gln Ile Pro Arg Thr Val Ser Ser Cys Arg Thr Gly Leu Ser Pro Leu
 1 5 10 15

His Ile Ser Pro Pro Ser Ser Pro Ser Pro Pro Lys Pro Pro Leu Tyr
 20 25 30

Ser Ala Ser Val Ser Leu Asp Thr Leu Asp Ala Pro Tyr Glu Gly Ile
 35 40 45

Pro Tyr Gly Ile Ser Glu Leu Arg Cys Phe Ser Pro Gln Lys Asn Leu
 50 55 60

Ala Leu Gly Glu Asp Leu Ser Pro Gly Tyr Gly Gln Asp His Asp Val
 65 70 75 80

Gly Ala Phe Gly Thr Gln Ala Pro Cys Ser Trp Arg Glu Gly Leu Val
 85 90 95

Asp Ala Ile Trp Ser Trp Leu Arg Phe Leu Ser Gly Leu Ser Thr Ala
 100 105 110

Pro Ile Thr Gly Pro Phe Ser Pro Gly Tyr Phe Tyr Ser Leu Gln Ala
 115 120 125

Pro Val Pro Pro Lys Ile Tyr Leu Ser Met Val Tyr Lys Leu Glu Gly
 130 135 140

Pro Thr Asp Val Thr Val Ala Leu Glu Leu Thr Thr Gly Asp Ala Gly
 145 150 155 160

Ser Cys His Ile Gly Gly Ile Ser Val Leu Asn Ala Glu Thr Ser Ser
 165 170 175

Arg His Ser Leu Arg Pro Leu Arg Val Pro Pro Thr Lys Leu Ala Arg
 180 185 190

Trp Val Gly Arg Cys Gly Arg Gln Leu Ser Gly Gly Trp Val Gln His
 195 200 205

Cys Tyr Glu Val Ser Leu Arg Gly Cys Leu Leu Leu Asp Leu Leu Val
 210 215 220

Cys Phe Ser Arg Pro Pro Gly Ser Arg Glu Glu Glu Ser Phe Thr Cys
 225 230 235 240

175

Arg Leu Gly Glu Ile Gln Val Met Leu Pro Arg Gly Ala Arg Ala Gly
 245 250 255

Leu Ala Val Cys Pro Ala Gly Val Gly Val Glu Ala Ala Pro Gly Arg
 260 265 270

Pro Leu Leu Gly Phe Ser Gly Glu Leu Gly Trp Arg Ser Gln Gly Gly
 275 280 285

Glu Met Cys Ala Trp Gly His Pro Leu Pro Ala Pro Gly Arg Pro Ala
 290 295 300

Val Leu Ser Leu Leu Ser Cys Gln Val Val Asp Ala Ala Ser Leu Leu
 305 310 315 320

Ala Pro Leu Pro Gln Val Gln Ala Val Thr Ile Ser His Ile Arg Trp
 325 330 335

Gln Pro Ser Ala Ser Glu Arg Glu Gly Pro Pro Ala Leu Leu Gln Leu
 340 345 350

Ser Cys Thr Leu His Trp Ser Phe Leu Leu Ser Gln Val Arg Cys Phe
 355 360 365

Arg Ile His Cys Trp Gly Gly Met Ser Asp Asp Ser Pro Gly Arg Glu
 370 375 380

Leu Pro Arg Pro Glu Met Pro Met Phe Leu Gly Leu Ala Phe Ala Thr
 385 390 395 400

Gln Tyr Arg Ile Val Asp Leu Leu Val Glu Ala Ala Gly Pro Gly Gln
 405 410 415

Asp Arg Arg Met Glu Phe Leu Val Glu Pro Val Pro Lys Glu Gly Phe
 420 425 430

Arg Val Pro Gln Ala Glu Trp Gly Arg Ala Val Leu Leu Tyr Ser Ala
 435 440 445

Pro Ala
 450

<210> 122
 <211> 302
 <212> PRT
 <213> Homo sapien

176

<400> 122

Met Glu Ala Ala Ala Val Thr Val Thr Arg Ser Ala Thr Arg Arg Arg
 1 5 10 15

Arg Arg Gln Leu Gln Gly Leu Ala Ala Pro Glu Ala Gly Thr Gln Glu
 20 25 30

Glu Gln Glu Asp Gln Glu Pro Arg Pro Arg Arg Arg Arg Pro Gly Arg
 35 40 45

Ser Ile Lys Asp Glu Glu Glu Glu Thr Val Phe Arg Glu Val Val Ser
 50 55 60

Phe Ser Pro Asp Pro Leu Pro Val Arg Tyr Tyr Asp Lys Asp Thr Thr
 65 70 75 80

Lys Pro Ile Ser Phe Tyr Leu Ser Ser Leu Glu Glu Leu Leu Ala Trp
 85 90 95

Lys Pro Arg Leu Glu Asp Gly Phe Asn Val Ala Leu Glu Pro Leu Ala
 100 105 110

Cys Arg Gln Pro Pro Leu Ser Ser Gln Arg Pro Arg Thr Leu Leu Cys
 115 120 125

His Asp Met Met Gly Gly Tyr Leu Asp Asp Arg Phe Ile Gln Gly Ser
 130 135 140

Val Val Gln Thr Pro Tyr Ala Phe Tyr His Trp Gln Cys Ile Asp Val
 145 150 155 160

Phe Val Tyr Phe Ser His His Thr Val Thr Ile Pro Pro Val Gly Trp
 165 170 175

Thr Asn Thr Ala His Arg His Gly Val Cys Val Leu Gly Thr Phe Ile
 180 185 190

Thr Glu Trp Asn Glu Gly Gly Arg Leu Cys Glu Ala Phe Leu Ala Gly
 195 200 205

Asp Glu Arg Ser Tyr Gln Ala Val Ala Asp Arg Leu Val Gln Ile Thr
 210 215 220

Gln Phe Phe Arg Phe Asp Gly Trp Leu Ile Asn Ile Glu Asn Ser Leu
 225 230 235 240

177

Ser Leu Ala Ala Val Gly Asn Met Pro Pro Phe Leu Arg Tyr Leu Thr
 245 250 255

Thr Gln Leu Leu Val Glu Ala Ala Gly Pro Gly Gln Asp Arg Arg Met
 260 265 270

Glu Phe Leu Val Glu Pro Val Pro Lys Glu Gly Phe Arg Val Pro Gln
 275 280 285

Ala Glu Trp Gly Arg Ala Val Leu Leu Tyr Ser Ala Pro Ala
 290 295 300

<210> 123

<211> 162

<212> PRT

<213> Homo sapien

<400> 123

Met Pro Arg Trp Tyr Phe Leu Leu Ala Arg Cys Phe Gly Cys Ala Val
 1 5 10 15

Ile Glu Asp Thr Trp His Tyr Phe Leu His Arg Leu Leu His His Lys
 20 25 30

Arg Ile Tyr Lys Tyr Ile His Lys Val His His Glu Phe Gln Ala Pro
 35 40 45

Phe Gly Met Glu Ala Glu Tyr Ala His Pro Leu Glu Thr Leu Ile Leu
 50 55 60

Gly Thr Gly Phe Phe Ile Gly Ile Val Leu Leu Cys Asp His Val Ile
 65 70 75 80

Leu Leu Trp Ala Trp Val Thr Ile Arg Leu Leu Glu Thr Ile Asp Val
 85 90 95

His Ser Gly Tyr Asp Ile Pro Leu Asn Pro Leu Asn Leu Ile Pro Phe
 100 105 110

Tyr Ala Gly Ser Arg His His Asp Phe His His Met Asn Phe Ile Gly
 115 120 125

Asn Tyr Ala Ser Thr Phe Thr Trp Trp Asp Arg Ile Phe Gly Thr Asp
 130 135 140

178

Ser Gln Tyr Asn Ala Tyr Asn Glu Lys Arg Lys Lys Phe Glu Lys Lys
 145 150 155 160

Thr Glu

<210> 124
 <211> 206
 <212> PRT
 <213> Homo sapien

<400> 124

Met Gly Glu Pro Gln Gly Ser Met Arg Ile Leu Val Thr Gly Gly Ser
 1 5 10 15

Gly Leu Val Gly Lys Ala Ile Gln Lys Val Val Ala Asp Gly Ala Gly
 20 25 30

Leu Pro Gly Glu Asp Trp Val Phe Val Ser Ser Lys Asp Ala Asp Leu
 35 40 45

Thr Asp Thr Ala Gln Thr Arg Ala Leu Phe Glu Lys Val Gln Pro Thr
 50 55 60

His Val Ile His Leu Ala Ala Met Val Gly Gly Leu Phe Arg Asn Ile
 65 70 75 80

Lys Tyr Asn Leu Asp Phe Trp Arg Lys Asn Val His Met Asn Asp Asn
 85 90 95

Val Leu His Ser Ala Phe Glu Val Gly Ala Arg Lys Val Val Ser Cys
 100 105 110

Leu Ser Thr Cys Ile Phe Pro Asp Lys Thr Thr Tyr Pro Ile Asp Glu
 115 120 125

Thr Met Ile His Asn Gly Pro Pro His Asn Ser Asn Phe Gly Tyr Ser
 130 135 140

Tyr Ala Lys Arg Met Ile Asp Val Gln Asn Ser Ala Gly Pro Thr Ser
 145 150 155 160

Ser Ser Thr Ala Ala Pro Ser Pro Leu Ser Ser Pro Pro Thr Ser Ser
 165 170 175

Gly Pro Thr Thr Thr Ser Thr Ser Arg Met Ala Thr Cys Cys Leu Ala
 180 185 190

179

Ser Ser Thr Arg Cys Thr Trp Pro Arg Ala Ala Ala Arg Pro
 195 200 205

<210> 125
 <211> 380
 <212> PRT
 <213> Homo sapien

<400> 125

Leu Gln Val Pro Ala Val Pro Gly Thr Leu Arg Ala Pro Gly Thr Pro
 1 5 10 15

Phe Pro Arg Val Pro Arg Pro Ser Leu Pro Ala Pro Pro Pro Thr Trp
 20 25 30

Leu Arg Gly Gln Pro Glu Arg Thr Arg Pro Glu Ala Ala Val Gly Glu
 35 40 45

Pro Ala Val Gly Leu Asp Ala Gly Ala Thr Asp Met Gly Glu Pro Gln
 50 55 60

Gly Ser Met Arg Ile Leu Val Thr Gly Gly Ser Gly Leu Val Gly Lys
 65 70 75 80

Ala Ile Gln Lys Val Val Ala Asp Gly Ala Gly Leu Pro Gly Glu Asp
 85 90 95

Trp Val Phe Val Ser Ser Lys Asp Ala Asp Leu Thr Asp Thr Ala Gln
 100 105 110

Thr Arg Ala Leu Phe Glu Lys Val Gln Pro Thr His Val Ile His Leu
 115 120 125

Ala Ala Met Val Gly Gly Leu Phe Arg Asn Ile Lys Tyr Asn Leu Asp
 130 135 140

Phe Trp Arg Lys Asn Val His Met Asn Asp Asn Val Leu His Ser Ala
 145 150 155 160

Phe Glu Val Gly Ala Arg Lys Val Val Ser Cys Leu Ser Thr Cys Ile
 165 170 175

Phe Pro Asp Lys Thr Thr Tyr Pro Ile Asp Glu Thr Met Ile His Asn
 180 185 190

180

Gly Pro Pro His Asn Ser Asn Phe Gly Tyr Ser Tyr Ala Lys Arg Met
 195 200 205

Ile Asp Val Gln Asn Arg Ala Tyr Phe Gln Gln Tyr Gly Cys Thr Phe
 210 215 220

Thr Ala Val Ile Pro Thr Asn Val Phe Gly Pro His Asp Asn Phe Asn
 225 230 235 240

Ile Glu Asp Gly His Val Leu Pro Gly Leu Ile His Lys Val His Leu
 245 250 255

Ala Lys Ser Ser Gly Ser Ala Leu Thr Val Trp Gly Thr Gly Asn Pro
 260 265 270

Arg Arg Gln Phe Ile Tyr Ser Leu Asp Leu Ala Gln Leu Phe Ile Trp
 275 280 285

Val Leu Arg Glu Tyr Asn Glu Val Glu Pro Ile Ile Leu Ser Val Gly
 290 295 300

Glu Glu Asp Glu Val Ser Ile Lys Glu Ala Ala Glu Ala Val Val Glu
 305 310 315 320

Ala Met Asp Phe His Gly Glu Val Thr Phe Asp Thr Thr Lys Ser Asp
 325 330 335

Gly Gln Phe Lys Lys Thr Ala Ser Asn Ser Lys Leu Arg Thr Tyr Leu
 340 345 350

Pro Asp Phe Arg Phe Thr Pro Phe Lys Gln Ala Val Lys Glu Thr Cys
 355 360 365

Ala Trp Phe Thr Asp Asn Tyr Glu Gln Ala Arg Lys
 370 375 380

<210> 126

<211> 380

<212> PRT

<213> Homo sapien

<400> 126

Leu Gln Val Pro Ala Val Pro Gly Thr Leu Arg Ala Pro Gly Thr Pro
 1 5 10 15

Phe Pro Arg Val Pro Arg Pro Ser Leu Pro Ala Pro Pro Thr Trp
 20 25 30

181

Leu Arg Gly Gln Pro Glu Arg Thr Arg Pro Glu Ala Ala Val Gly Glu
 35 40 45

Pro Ala Val Gly Leu Asp Ala Gly Ala Thr Asp Met Gly Glu Pro Gln
 50 55 60

Gly Ser Met Arg Ile Leu Val Thr Gly Gly Ser Gly Leu Val Gly Lys
 65 70 75 80

Ala Ile Gln Lys Val Val Ala Asp Gly Ala Gly Leu Pro Gly Glu Asp
 85 90 95

Trp Val Phe Val Ser Ser Lys Asp Ala Asp Leu Thr Asp Thr Ala Gln
 100 105 110

Thr Arg Ala Leu Phe Glu Lys Val Gln Pro Thr His Val Ile His Leu
 115 120 125

Ala Ala Met Val Gly Gly Leu Phe Arg Asn Ile Lys Tyr Asn Leu Asp
 130 135 140

Phe Trp Arg Lys Asn Val His Met Asn Asp Asn Val Leu His Ser Ala
 145 150 155 160

Phe Glu Val Gly Ala Arg Lys Val Val Ser Cys Leu Ser Thr Cys Ile
 165 170 175

Phe Pro Asp Lys Thr Thr Tyr Pro Ile Asp Glu Thr Met Ile His Asn
 180 185 190

Gly Pro Pro His Asn Ser Asn Phe Gly Tyr Ser Tyr Ala Lys Arg Met
 195 200 205

Ile Asp Val Gln Asn Arg Ala Tyr Phe Gln Gln Tyr Gly Cys Thr Phe
 210 215 220

Thr Ala Val Ile Pro Thr Asn Val Phe Gly Pro His Asp Asn Phe Asn
 225 230 235 240

Ile Glu Asp Gly His Val Leu Pro Gly Leu Ile His Lys Val His Leu
 245 250 255

Ala Lys Ser Ser Gly Ser Ala Leu Thr Val Trp Gly Thr Gly Asn Pro
 260 265 270

182

Arg Arg Gln Phe Ile Tyr Ser Leu Asp Leu Ala Gln Leu Phe Ile Trp
 275 280 285

Val Leu Arg Glu Tyr Asn Glu Val Glu Pro Ile Ile Leu Ser Val Gly
 290 295 300

Glu Glu Asp Glu Val Ser Ile Lys Glu Ala Ala Glu Ala Val Val Glu
 305 310 315 320

Ala Met Asp Phe His Gly Glu Val Thr Phe Asp Thr Thr Lys Ser Asp
 325 330 335

Gly Gln Phe Lys Lys Thr Ala Ser Asn Ser Lys Leu Arg Thr Tyr Leu
 340 345 350

Pro Asp Phe Arg Phe Thr Pro Phe Lys Gln Ala Val Lys Glu Thr Cys
 355 360 365

Ala Trp Phe Thr Asp Asn Tyr Glu Gln Ala Arg Lys
 370 375 380

<210> 127

<211> 334

<212> PRT

<213> Homo sapien

<400> 127

Met Arg Ala Leu Ala Ala Asn Arg Val Asn Asp Leu Cys Gln Glu Pro
 1 5 10 15

Pro Ser Gln Gly Cys Leu Pro Pro Pro Leu Val Ser Gln Arg Gly Val
 20 25 30

Glu Cys Thr Phe Ser Arg Pro Ser Gly Glu Ser Trp Val Gly Thr Ser
 35 40 45

Cys Ser Gly Leu Gly Gly Ser Ser Gly Pro Leu Arg Arg Cys Arg Leu
 50 55 60

Arg Ala Pro Arg Gly Thr Gly Leu Arg Arg Gly Ser Ala Ser Val Gln
 65 70 75 80

Leu Gly Leu Ser Gly Cys Gln Trp Thr Met Pro His Ser Glu Gly Leu
 85 90 95

Thr Leu Cys Gln Leu Pro Gln Lys Ser Gly Ala Pro Lys Asp Glu Ser

183

100	105	110
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Val Met Thr Ser Ala Ser His Cys Leu Thr Leu Gln Gly Ala Thr Asp
 115 120 125

Met Gly Glu Pro Gln Gly Ser Met Arg Ile Leu Val Thr Gly Gly Ser
 130 135 140

Gly Leu Val Gly Lys Ala Ile Gln Lys Val Val Ala Asp Gly Ala Gly
 145 150 155 160

Leu Pro Gly Glu Asp Trp Val Phe Val Ser Ser Lys Asp Ala Asp Leu
 165 170 175

Thr Asp Thr Ala Gln Thr Arg Ala Leu Phe Glu Lys Val Gln Pro Thr
 180 185 190

His Val Ile His Leu Ala Ala Met Val Gly Gly Leu Phe Arg Asn Ile
 195 200 205

Lys Tyr Asn Leu Asp Phe Trp Arg Lys Asn Val His Met Asn Asp Asn
 210 215 220

Val Leu His Ser Ala Phe Glu Val Gly Ala Arg Lys Val Val Ser Cys
 225 230 235 240

Leu Ser Thr Cys Ile Phe Pro Asp Lys Thr Thr Tyr Pro Ile Asp Glu
 245 250 255

Thr Met Ile His Asn Gly Pro Pro His Asn Ser Asn Phe Gly Tyr Ser
 260 265 270

Tyr Ala Lys Arg Met Ile Asp Val Gln Asn Ser Ala Gly Pro Thr Ser
 275 280 285

Ser Ser Thr Ala Ala Pro Ser Pro Leu Ser Ser Pro Pro Thr Ser Ser
 290 295 300

Gly Pro Thr Thr Thr Ser Thr Ser Arg Met Ala Thr Cys Cys Leu Ala
 305 310 315 320

Ser Ser Thr Arg Cys Thr Trp Pro Arg Ala Ala Ala Arg Pro
 325 330

<210> 128
 <211> 327

184

<212> PRT

<213> Homo sapien

<400> 128

His Tyr Ser Ala Thr Asp Met Gly Glu Pro Gln Gly Ser Met Arg Ile
 1 5 10 15

Leu Val Thr Gly Gly Ser Gly Leu Val Gly Lys Ala Ile Gln Lys Val
 20 25 30

Val Ala Asp Gly Ala Gly Leu Pro Gly Glu Asp Trp Val Phe Val Ser
 35 40 45

Ser Lys Asp Ala Asp Leu Thr Asp Thr Ala Gln Thr Arg Ala Leu Phe
 50 55 60

Glu Lys Val Gln Pro Thr His Val Ile His Leu Ala Ala Met Val Gly
 65 70 75 80

Gly Leu Phe Arg Asn Ile Lys Tyr Asn Leu Asp Phe Trp Arg Lys Asn
 85 90 95

Val His Met Asn Asp Asn Val Leu His Ser Ala Phe Glu Val Gly Ala
 100 105 110

Arg Lys Val Val Ser Cys Leu Ser Thr Cys Ile Phe Pro Asp Lys Thr
 115 120 125

Thr Tyr Pro Ile Asp Glu Thr Met Ile His Asn Gly Pro Pro His Asn
 130 135 140

Ser Asn Phe Gly Tyr Ser Tyr Ala Lys Arg Met Ile Asp Val Gln Asn
 145 150 155 160

Arg Ala Tyr Phe Gln Gln Tyr Gly Cys Thr Phe Thr Ala Val Ile Pro
 165 170 175

Thr Asn Val Phe Gly Pro His Asp Asn Phe Asn Ile Glu Asp Gly His
 180 185 190

Val Leu Pro Gly Leu Ile His Lys Val His Leu Ala Lys Ser Ser Gly
 195 200 205

Ser Ala Leu Thr Val Trp Gly Thr Gly Asn Pro Arg Arg Gln Phe Ile
 210 215 220

185

Tyr Ser Leu Asp Leu Ala Gln Leu Phe Ile Trp Val Leu Arg Glu Tyr
 225 230 235 240

Asn Glu Val Glu Pro Ile Ile Leu Ser Val Gly Glu Glu Asp Glu Val
 245 250 255

Ser Ile Lys Glu Ala Ala Glu Ala Val Val Glu Ala Met Asp Phe His
 260 265 270

Gly Glu Val Thr Phe Asp Thr Thr Lys Ser Asp Gly Gln Phe Lys Lys
 275 280 285

Thr Ala Ser Asn Ser Lys Leu Arg Thr Tyr Leu Pro Asp Phe Arg Phe
 290 295 300

Thr Pro Phe Lys Gln Ala Val Lys Glu Thr Cys Ala Trp Phe Thr Asp
 305 310 315 320

Asn Tyr Glu Gln Ala Arg Lys
 325

<210> 129
 <211> 161
 <212> PRT
 <213> Homo sapien

<400> 129

Met Gly Glu Pro Gln Gly Ser Met Arg Ile Leu Val Thr Gly Gly Ser
 1 5 10 15

Gly Leu Val Gly Lys Ala Ile Gln Lys Val Val Ala Asp Gly Ala Gly
 20 25 30

Leu Pro Gly Glu Asp Trp Val Phe Val Ser Ser Lys Asp Ala Asp Leu
 35 40 45

Thr Asp Thr Ala Gln Thr Arg Ala Leu Phe Glu Lys Val Gln Pro Thr
 50 55 60

His Val Ile His Leu Ala Ala Met Val Gly Gly Leu Phe Arg Asn Ile
 65 70 75 80

Lys Tyr Asn Leu Asp Phe Trp Arg Lys Asn Val His Met Asn Asp Asn
 85 90 95

Val Leu His Ser Ala Phe Glu Val Gly Ala Arg Lys Val Val Ser Cys
 100 105 110

186

Leu Ser Thr Cys Ile Phe Pro Asp Lys Thr Thr Tyr Pro Ile Asp Glu
 115 120 125

Thr Met Ile His Asn Gly Pro Pro His Asn Ser Asn Phe Gly Tyr Ser
 130 135 140

Tyr Ala Lys Arg Met Ile Asp Val Gln Asn Arg Ser Ser Arg Pro Ser
 145 150 155 160

Cys

<210> 130
 <211> 326
 <212> PRT
 <213> Homo sapien

<400> 130

Leu Gln Val Pro Ala Val Pro Gly Thr Leu Arg Ala Pro Gly Thr Pro
 1 5 10 15

Phe Pro Arg Val Pro Arg Pro Ser Leu Pro Ala Pro Pro Thr Trp
 20 25 30

Leu Arg Gly Gln Pro Glu Arg Thr Arg Pro Glu Ala Ala Val Gly Glu
 35 40 45

Pro Ala Val Gly Leu Asp Ala Gly Ala Thr Asp Met Gly Glu Pro Gln
 50 55 60

Gly Ser Met Arg Ile Leu Val Thr Gly Gly Ser Gly Leu Val Gly Lys
 65 70 75 80

Ala Ile Gln Lys Val Val Ala Asp Gly Ala Gly Leu Pro Gly Glu Asp
 85 90 95

Trp Val Phe Val Ser Ser Lys Asp Ala Asp Leu Thr Asp Thr Ala Gln
 100 105 110

Thr Arg Ala Leu Phe Glu Lys Val Gln Pro Thr His Val Ile His Leu
 115 120 125

Ala Ala Met Val Gly Gly Leu Phe Arg Asn Ile Lys Tyr Asn Leu Asp
 130 135 140

187

Phe Trp Arg Lys Asn Val His Met Asn Asp Asn Val Leu His Ser Ala
 145 150 155 160

Phe Glu Val Gly Ala Arg Lys Val Val Ser Cys Leu Ser Thr Cys Ile
 165 170 175

Phe Pro Asp Lys Thr Thr Tyr Pro Ile Asp Glu Thr Met Ile His Asn
 180 185 190

Gly Pro Pro His Asn Ser Asn Phe Gly Tyr Ser Tyr Ala Lys Arg Met
 195 200 205

Ile Asp Val Gln Asn Arg Ala Tyr Phe Gln Gln Tyr Gly Cys Thr Phe
 210 215 220

Thr Ala Val Ile Pro Thr Asn Val Phe Gly Pro His Asp Asn Phe Asn
 225 230 235 240

Ile Glu Asp Gly His Val Leu Pro Gly Leu Ile His Lys Val His Leu
 245 250 255

Ala Lys Ser Ser Gly Ser Ala Leu Thr Val Trp Gly Thr Gly Asn Pro
 260 265 270

Arg Arg Gln Phe Ile Tyr Ser Leu Asp Leu Ala Gln Leu Phe Ile Trp
 275 280 285

Val Leu Arg Glu Tyr Asn Glu Val Glu Pro Ile Ile Leu Ser Gly Gly
 290 295 300

Tyr Leu Ser Pro Gln Pro Pro Ser Ser Met Val Gly Gln Asp Pro Arg
 305 310 315 320

Leu Ser Trp Glu Ala Gly
 325

<210> 131

<211> 216

<212> PRT

<213> Homo sapien

<400> 131

Met Gln Val Arg Thr Asp Pro Arg Ser Arg Gln Cys Trp Pro Leu Glu
 1 5 10 15

His Arg Thr Trp Leu Thr Asp Ser His Ser Ser Cys Leu Phe Pro Leu
 20 25 30

Pro Leu Glu Gln Pro Ser Leu Leu Gln Ser Asn Pro Cys Pro Ser Phe
35 40 45

Leu Pro Leu Ser Arg Ala Ala Pro Pro Ala His Leu Arg Pro Gly Pro
50 55 60

Ser Tyr Leu Leu Pro Leu Leu Ser Cys Pro Ile Pro Val Val Arg Arg
65 70 75 80

Glu Ser Thr Gly Gln Arg Pro Ser Ser Thr Cys Asp Leu Gly Glu Cys
85 90 95

Gln Ala Ser Pro Arg Gly Pro Gly Pro Arg Gly Pro Gly Arg Leu Cys
100 105 110

Cys Gly Gly Ser Arg Val Arg Thr Gly Ala Ala Ser Pro Leu Ala Val
115 120 125

Cys Leu Cys Pro Leu His Trp Pro Leu Glu Ala Gln Arg Pro Ser Gly
130 135 140

Tyr Phe Pro Ser Ser Gly Leu Pro Leu Met Leu Phe Pro Ala Pro Phe
145 150 155 160

Phe Tyr Leu Glu Thr Pro Ile Pro Ser His Pro Leu Gln Arg Ser Ser
165 170 175

Gln Ser Cys Pro Gln His Gly Ser Leu His Ser Pro Trp Val Ser Pro
180 185 190

Pro Val Ser Cys Leu Pro Arg Thr Pro Asp Leu Pro Leu Pro Gly Trp
195 200 205

Pro Arg Trp Ile Leu Tyr Ser Asp
210 215

<210>	132
<211>	108
<212>	PRT
<213>	Homo sapien

<400> 132

Met Ala His Ala Thr Leu Ser Ala Ala Pro Ser Asn Pro Arg Leu Leu
1 5 10 15

189

Arg Val Ala Leu Leu Leu Leu Leu Val Ala Ala Ser Arg Arg Ala
 20 25 30

Ala Gly Gly Ser Arg Arg Pro Gly Val Pro Gly Pro Asp Ala Ala Gly
 35 40 45

Val Gly Ala Pro Arg Arg Thr Ala Pro Leu Asn Gln Arg Val Tyr Ser
 50 55 60

Ser Leu Gly Ala Ser Val Val Thr Glu Leu Arg Cys Gln Cys Leu Gln
 65 70 75 80

Thr Leu Gln Gly Ile His Leu Lys Asn Ile Gln Ser Val Asn Val Arg
 85 90 95

Ser Pro Gly Pro His Cys Ala Gln Thr Glu Val Met
 100 105

<210> 133

<211> 142

<212> PRT

<213> Homo sapien

<400> 133

Lys Gly Ser Pro Ile Leu Gly Ser His Thr Ala Arg Val Ala Gly Thr
 1 5 10 15

Ser Pro Pro Ala Leu Pro Leu Leu Ala Gln Leu Pro Asp Ala Ser Ala
 20 25 30

Glu Pro His Gly Pro Arg His Ala Leu Arg Arg Pro Gln Gln Ser Pro
 35 40 45

Ala Pro Ala Gly Gly Ala Ala Ala Pro Ala Pro Gly Gly Arg Gln Pro
 50 55 60

Ala Arg Ser Arg Trp Val Pro Ala Pro Trp Gly Pro Arg Ala Gly Arg
 65 70 75 80

Gly Trp Gly Gly Arg Pro Ala Pro Thr Ala Pro Leu Asn Gln Arg Val
 85 90 95

Tyr Ser Ser Leu Gly Ala Ser Val Val Thr Glu Leu Arg Cys Gln Cys
 100 105 110

Leu Gln Thr Leu Gln Gly Ile His Leu Lys Asn Ile Gln Ser Val Asn
 115 120 125

190

Val Arg Ser Pro Gly Pro His Cys Ala Gln Thr Glu Val Met
 130 135 140

<210> 134
 <211> 482
 <212> PRT
 <213> Homo sapien

<400> 134

Met Val Met Glu Lys Pro Ser Pro Leu Leu Val Gly Arg Glu Phe Val
 1 5 10 15

Arg Gln Tyr Tyr Thr Leu Leu Asn Lys Ala Pro Glu Tyr Leu His Arg
 20 25 30

Phe Tyr Gly Arg Asn Ser Ser Tyr Val His Gly Gly Val Asp Ala Ser
 35 40 45

Gly Lys Pro Gln Glu Ala Val Tyr Gly Gln Asn Asp Ile His His Lys
 50 55 60

Val Leu Ser Leu Asn Phe Ser Glu Cys His Thr Lys Ile Arg His Val
 65 70 75 80

Asp Ala His Ala Thr Leu Ser Asp Gly Val Val Val Gln Val Met Gly
 85 90 95

Leu Leu Ser Asn Ser Gly Gln Pro Glu Arg Lys Phe Met Gln Thr Phe
 100 105 110

Val Leu Ala Pro Glu Gly Ser Val Pro Asn Lys Phe Tyr Val His Asn
 115 120 125

Asp Met Phe Arg Tyr Glu Asp Glu Val Phe Gly Asp Ser Glu Pro Glu
 130 135 140

Leu Asp Glu Glu Ser Glu Asp Glu Val Glu Glu Glu Gln Glu Glu Arg
 145 150 155 160

Gln Pro Ser Pro Glu Pro Val Gln Glu Asn Ala Asn Ser Gly Tyr Tyr
 165 170 175

Glu Ala His Pro Val Thr Asn Gly Ile Glu Glu Pro Leu Glu Glu Ser
 180 185 190

191

Ser His Glu Pro Glu Pro Glu Pro Glu Ser Glu Thr Lys Thr Glu Glu
 195 200 205

Leu Lys Pro Gln Val Glu Glu Lys Asn Leu Glu Glu Leu Glu Glu Lys
 210 215 220

Ser Thr Thr Pro Pro Pro Ala Glu Pro Val Ser Leu Pro Gln Glu Pro
 225 230 235 240

Pro Lys Ala Phe Ser Trp Ala Ser Val Thr Ser Lys Asn Leu Pro Pro
 245 250 255

Ser Gly Thr Val Ser Ser Ser Gly Ile His Pro Met Leu Lys His Gln
 260 265 270

Ser His Ser Gln Glu Ser Lys Leu Asn Gln Lys Phe Asn Leu Ser His
 275 280 285

Leu Val Cys Val Asn Asn Asp Leu Glu Asn Asp Leu Val Phe Leu Leu
 290 295 300

Glu Asp Gln Asp Gln Ala Glu Glu Ile Met Glu Gln Asn Asp Ser Asp
 305 310 315 320

Asn Arg Arg Ile Ile Arg Tyr Pro Asp Ser His Gln Leu Phe Val Gly
 325 330 335

Asn Leu Pro His Asp Ile Asp Glu Asn Glu Leu Lys Glu Phe Phe Met
 340 345 350

Ser Phe Gly Asn Val Val Glu Leu Arg Ile Asn Thr Lys Gly Val Gly
 355 360 365

Gly Lys Leu Pro Asn Phe Gly Phe Val Val Phe Asp Asp Ser Glu Pro
 370 375 380

Val Gln Arg Ile Leu Ile Ala Lys Pro Ile Met Phe Arg Gly Glu Val
 385 390 395 400

Arg Leu Asn Val Glu Glu Lys Lys Thr Arg Ala Ala Arg Glu Arg Glu
 405 410 415

Thr Arg Gly Gly Gly Asp Asp Arg Arg Asp Ile Arg Arg Asn Asp Arg
 420 425 430

Gly Pro Gly Gly Pro Arg Gly Ile Val Gly Gly Gly Met Met Arg Asp

192

435

440

445

Arg Asp Gly Arg Gly Pro Pro Pro Arg Gly Gly Met Ala Gln Lys Leu
 450 455 460

Gly Ser Gly Arg Gly Thr Gly Gln Met Glu Gly Arg Phe Thr Gly Gln
 465 470 475 480

Arg Arg

<210> 135

<211> 392

<212> PRT

<213> Homo sapien

<400> 135

Leu Ser Arg Ser Trp Val Cys Cys Leu Thr Val Asp Asn Gln Lys Glu
 1 5 10 15

Ser Leu Cys Lys Pro Leu Phe Trp Leu Leu Lys Asp Leu Phe Gln Ile
 20 25 30

Asn Phe Met Phe Thr Met Ile Cys Phe Val Met Lys Met Lys Cys Tyr
 35 40 45

Gly Asp Ser Glu Pro Glu Leu Asp Glu Glu Ser Glu Asp Glu Val Glu
 50 55 60

Glu Glu Gln Glu Glu Arg Gln Pro Ser Pro Glu Pro Val Gln Glu Asn
 65 70 75 80

Ala Asn Ser Gly Tyr Tyr Glu Ala His Pro Val Thr Asn Gly Ile Glu
 85 90 95

Glu Pro Leu Glu Glu Ser Ser His Glu Pro Glu Pro Glu Pro Glu Ser
 100 105 110

Glu Thr Lys Thr Glu Glu Leu Lys Pro Gln Val Glu Glu Lys Asn Leu
 115 120 125

Glu Glu Leu Glu Glu Lys Ser Thr Thr Pro Pro Pro Ala Glu Pro Val
 130 135 140

Ser Leu Pro Gln Glu Pro Pro Lys Ala Phe Ser Trp Ala Ser Val Thr
 145 150 155 160

193

Ser Lys Asn Leu Pro Pro Ser Gly Thr Val Ser Ser Ser Gly Ile Pro
 165 170 175

Pro His Val Lys Ala Pro Val Ser Gln Pro Arg Val Glu Ala Lys Pro
 180 185 190

Glu Val Gln Ser Gln Pro Pro Arg Val Arg Glu Gln Arg Pro Arg Glu
 195 200 205

Arg Pro Gly Phe Pro Pro Arg Gly Pro Arg Pro Gly Arg Gly Asp Met
 210 215 220

Glu Gln Asn Asp Ser Asp Asn Arg Arg Ile Ile Arg Tyr Pro Asp Ser
 225 230 235 240

His Gln Leu Phe Val Gly Asn Leu Pro His Asp Ile Asp Glu Asn Glu
 245 250 255

Leu Lys Glu Phe Phe Met Ser Phe Gly Asn Val Val Glu Leu Arg Ile
 260 265 270

Asn Thr Lys Gly Val Gly Gly Lys Leu Pro Asn Phe Gly Phe Val Val
 275 280 285

Phe Asp Asp Ser Glu Pro Val Gln Arg Ile Leu Ile Ala Lys Pro Ile
 290 295 300

Met Phe Arg Gly Glu Val Arg Leu Asn Val Glu Glu Lys Lys Thr Arg
 305 310 315 320

Ala Ala Arg Glu Arg Glu Thr Arg Gly Gly Gly Asp Asp Arg Arg Asp
 325 330 335

Ile Arg Arg Asn Asp Arg Gly Pro Gly Gly Pro Arg Gly Ile Val Gly
 340 345 350

Gly Gly Met Met Arg Asp Arg Asp Gly Arg Gly Pro Pro Pro Arg Gly
 355 360 365

Gly Met Ala Gln Lys Leu Gly Ser Gly Arg Gly Thr Gly Gln Met Glu
 370 375 380

Gly Arg Phe Thr Gly Gln Arg Arg
 385 390

194

<210> 136

<211> 316

<212> PRT

<213> Homo sapien

<400> 136

Asp Trp Glu Glu Lys Arg Val Leu Ala Ile Cys Leu Ala Ser Gln Ser
 1 5 10 15

Glu Asp Glu Val Glu Glu Glu Gln Glu Glu Arg Gln Pro Ser Pro Glu
 20 25 30

Pro Val Gln Glu Asn Ala Asn Ser Gly Tyr Tyr Glu Ala His Pro Val
 35 40 45

Thr Asn Gly Ile Glu Glu Pro Leu Glu Glu Ser Ser His Glu Pro Glu
 50 55 60

Pro Glu Pro Glu Ser Glu Thr Lys Thr Glu Glu Leu Lys Pro Gln Val
 65 70 75 80

Glu Glu Lys Asn Leu Glu Glu Leu Glu Glu Lys Ser Thr Thr Pro Pro
 85 90 95

Pro Ala Glu Pro Val Ser Leu Pro Gln Glu Pro Pro Lys Pro Arg Val
 100 105 110

Glu Ala Lys Pro Glu Val Gln Ser Gln Pro Pro Arg Val Arg Glu Gln
 115 120 125

Arg Pro Arg Glu Arg Pro Gly Phe Pro Pro Arg Gly Pro Arg Pro Gly
 130 135 140

Arg Gly Asp Met Glu Gln Asn Asp Ser Asp Asn Arg Arg Ile Ile Arg
 145 150 155 160

Tyr Pro Asp Ser His Gln Leu Phe Val Gly Asn Leu Pro His Asp Ile
 165 170 175

Asp Glu Asn Glu Leu Lys Glu Phe Phe Met Ser Phe Gly Asn Val Val
 180 185 190

Glu Leu Arg Ile Asn Thr Lys Gly Val Gly Gly Lys Leu Pro Asn Phe
 195 200 205

Gly Phe Val Val Phe Asp Asp Ser Glu Pro Val Gln Arg Ile Leu Ile
 210 215 220

195

Ala Lys Pro Ile Met Phe Arg Gly Glu Val Arg Leu Asn Val Glu Glu
 225 230 235 240

Lys Lys Thr Arg Ala Ala Arg Glu Arg Glu Thr Arg Gly Gly Gly Asp
 245 250 255

Asp Arg Arg Asp Ile Arg Arg Asn Asp Arg Gly Pro Gly Gly Pro Arg
 260 265 270

Gly Ile Val Gly Gly Gly Met Met Arg Asp Arg Asp Gly Arg Gly Pro
 275 280 285

Pro Pro Arg Gly Gly Met Ala Gln Lys Leu Gly Ser Gly Arg Gly Thr
 290 295 300

Gly Gln Met Glu Gly Arg Phe Thr Gly Gln Arg Arg
 305 310 315

<210> 137
 <211> 314
 <212> PRT
 <213> Homo sapien
 <220>
 <221> MISC_FEATURE
 <222> (4)..(4)
 <223> X=any amino acid

<400> 137

Leu Gly Gly Xaa Glu Ser Gln Leu Leu Leu Ala Ser Gln Ser Glu Asp
 1 5 10 15

Glu Val Glu Glu Glu Gln Glu Glu Arg Gln Pro Ser Pro Glu Pro Val
 20 25 30

Gln Glu Asn Ala Asn Ser Gly Tyr Tyr Glu Ala His Pro Val Thr Asn
 35 40 45

Gly Ile Glu Glu Pro Leu Glu Glu Ser Ser His Glu Pro Glu Pro Glu
 50 55 60

Pro Glu Ser Glu Thr Lys Thr Glu Glu Leu Lys Pro Gln Val Glu Glu
 65 70 75 80

Lys Asn Leu Glu Glu Leu Glu Glu Lys Ser Thr Thr Pro Pro Pro Ala
 85 90 95

196

Glu Pro Val Ser Leu Pro Gln Glu Pro Pro Lys Pro Arg Val Glu Ala
 100 105 110

Lys Pro Glu Val Gln Ser Gln Pro Pro Arg Val Arg Glu Gln Arg Pro
 115 120 125

Arg Glu Arg Pro Gly Phe Pro Pro Arg Gly Pro Arg Pro Gly Arg Gly
 130 135 140

Asp Met Glu Gln Asn Asp Ser Asp Asn Arg Arg Ile Ile Arg Tyr Pro
 145 150 155 160

Asp Ser His Gln Leu Phe Val Gly Asn Leu Pro His Asp Ile Asp Glu
 165 170 175

Asn Glu Leu Lys Glu Phe Phe Met Ser Phe Gly Asn Val Val Glu Leu
 180 185 190

Arg Ile Asn Thr Lys Gly Val Gly Gly Lys Leu Pro Asn Phe Gly Phe
 195 200 205

Val Val Phe Asp Asp Ser Glu Pro Val Gln Arg Ile Leu Ile Ala Lys
 210 215 220

Pro Ile Met Phe Arg Gly Glu Val Arg Leu Asn Val Glu Glu Lys Lys
 225 230 235 240

Thr Arg Ala Ala Arg Glu Arg Glu Thr Arg Gly Gly Gly Asp Asp Arg
 245 250 255

Arg Asp Ile Arg Arg Asn Asp Arg Gly Pro Gly Gly Pro Arg Gly Ile
 260 265 270

Val Gly Gly Gly Met Met Arg Asp Arg Asp Gly Arg Gly Pro Pro Pro
 275 280 285

Arg Gly Gly Met Ala Gln Lys Leu Gly Ser Gly Arg Gly Thr Gly Gln
 290 295 300

Met Glu Gly Arg Phe Thr Gly Gln Arg Arg
 305 310

<210> 138

<211> 169

<212> PRT

197

<213> Homo sapien

<400> 138

Met Glu Gln Asn Asp Ser Asp Asn Arg Arg Ile Ile Arg Tyr Pro Asp
 1 5 10 15

Ser His Gln Leu Phe Val Gly Asn Leu Pro His Asp Ile Asp Glu Asn
 20 25 30

Glu Leu Lys Glu Phe Phe Met Ser Phe Gly Asn Val Val Glu Leu Arg
 35 40 45

Ile Asn Thr Lys Gly Val Gly Gly Lys Leu Pro Asn Phe Gly Phe Val
 50 55 60

Val Phe Asp Asp Ser Glu Pro Val Gln Arg Ile Leu Ile Ala Lys Pro
 65 70 75 80

Ile Met Phe Arg Gly Glu Val Arg Leu Asn Val Glu Glu Lys Lys Thr
 85 90 95

Arg Ala Ala Arg Glu Arg Glu Thr Arg Gly Gly Gly Asp Asp Arg Arg
 100 105 110

Asp Ile Arg Arg Asn Asp Arg Gly Pro Gly Gly Pro Arg Gly Ile Val
 115 120 125

Gly Gly Gly Met Met Arg Asp Arg Asp Gly Arg Gly Pro Pro Pro Arg
 130 135 140

Gly Gly Met Ala Gln Lys Leu Gly Ser Gly Arg Gly Thr Gly Gln Met
 145 150 155 160

Glu Gly Arg Phe Thr Gly Gln Arg Arg
 165

<210> 139

<211> 147

<212> PRT

<213> Homo sapien

<400> 139

Met Gly Arg Val Arg Thr Lys Thr Val Lys Lys Ala Ala Arg Val Ile
 1 5 10 15

Ile Glu Lys Tyr Tyr Thr Arg Leu Gly Asn Asp Phe His Thr Asn Lys
 20 25 30

198

Arg Val Cys Glu Glu Ile Ala Ile Ile Pro Ser Lys Lys Leu Arg Asn
 35 40 45

Lys Ile Ala Gly Tyr Val Thr His Leu Met Lys Arg Ile Gln Arg Gly
 50 55 60

Pro Val Arg Gly Ile Ser Ile Lys Leu Gln Glu Glu Glu Arg Glu Arg
 65 70 75 80

Arg Asp Asn Tyr Val Pro Glu Val Ser Ala Leu Asp Gln Glu Ile Ile
 85 90 95

Glu Val Asp Pro Asp Thr Lys Glu Met Leu Lys Leu Leu Asp Phe Gly
 100 105 110

Ser Leu Ser Asn Leu Gln Val Ile His Pro Asn Cys Arg Leu Ser Asp
 115 120 125

Leu Lys Val Gly Gln Thr Ala Val Gly Met Asn Phe Lys Thr Pro Arg
 130 135 140

Gly Pro Val
 145

<210> 140
 <211> 166
 <212> PRT
 <213> Homo sapien

<220>
 <221> MISC_FEATURE
 <222> (129)..(129)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (134)..(134)
 <223> X=any amino acid

<400> 140

Ala Leu Thr Gly Phe Ala Cys Ala Ser Cys Phe Leu Phe Tyr Gln Gly
 1 5 10 15

Pro Ala Asn Met Gly Arg Val Arg Thr Lys Thr Val Lys Lys Ala Ala
 20 25 30

199

Arg Val Ile Ile Glu Lys Tyr Tyr Thr Arg Leu Gly Asn Asp Phe His
 35 40 45

Thr Asn Lys Arg Val Cys Glu Glu Ile Ala Ile Ile Pro Ser Lys Lys
 50 55 60

Leu Arg Asn Lys Ile Ala Gly Tyr Val Thr His Leu Met Lys Arg Ile
 65 70 75 80

Gln Arg Gly Pro Val Arg Gly Ile Ser Ile Lys Leu Gln Glu Glu Glu
 85 90 95

Arg Glu Arg Arg Asp Asn Tyr Val Pro Glu Val Ser Ala Leu Asp Gln
 100 105 110

Glu Ile Ile Glu Val Asp Pro Asp Thr Lys Glu Met Leu Lys Leu Leu
 115 120 125

Xaa Phe Gly Ser Leu Xaa Asn Leu Gln Val Ile His Pro Asn Cys Arg
 130 135 140

Leu Ser Asp Leu Lys Val Gly Gln Thr Ala Val Gly Met Asn Phe Lys
 145 150 155 160

Thr Pro Arg Gly Pro Val
 165

<210> 141
 <211> 254
 <212> PRT
 <213> Homo sapien

<400> 141

Met Ser Val Asn Ala Ile Arg Lys Gln Ser Thr Asp Glu Glu Val Thr
 1 5 10 15

Ser Leu Ala Lys Ser Leu Ile Lys Ser Trp Lys Lys Leu Leu Asp Gly
 20 25 30

Pro Ser Thr Glu Lys Asp Leu Asp Glu Lys Lys Lys Glu Pro Ala Ile
 35 40 45

Thr Ser Gln Asn Ser Pro Glu Ala Arg Glu Glu Ser Thr Ser Ser Gly
 50 55 60

Asn Val Ser Asn Arg Lys Asp Glu Thr Asn Ala Arg Asp Thr Tyr Val
 65 70 75 80

200

Ser Ser Phe Pro Arg Ala Pro Ser Thr Ser Asp Ser Val Arg Leu Lys
85 90 95

Cys Arg Glu Met Leu Ala Ala Ala Leu Arg Thr Gly Asp Asp Tyr Ile
100 105 110

Ala Ile Gly Ala Asp Glu Glu Glu Leu Gly Ser Gln Ile Glu Glu Ala
115 120 125

Ile Tyr Gln Glu Ile Arg Asn Thr Asp Met Lys Tyr Lys Asn Arg Val
130 135 140

Arg Ser Arg Ile Ser Asn Leu Lys Asp Ala Lys Asn Pro Asn Leu Arg
145 150 155 160

Lys Asn Val Leu Cys Gly Asn Ile Pro Pro Asp Leu Phe Ala Arg Met
165 170 175

Thr Ala Glu Glu Met Ala Ser Asp Glu Leu Lys Glu Met Arg Lys Asn
180 185 190

Leu Thr Lys Glu Ala Ile Arg Glu His Gln Met Ala Lys Thr Gly Gly
195 200 205

Thr Gln Thr Asp Leu Phe Thr Cys Gly Lys Cys Lys Lys Lys Asn Cys
210 215 220

Thr Tyr Thr Gln Val Gln Thr Arg Ser Ala Asp Glu Pro Met Thr Thr
225 230 235 240

Phe Val Val Cys Asn Glu Cys Gly Asn Arg Trp Lys Phe Cys
245 250

<210> 142

<211> 302

<212> PRT

<213> Homo sapien

<400> 142

Arg Gly Leu Asn Val Arg Leu Val Ile Ser Thr Val Leu His Val Cys
1 5 10 15

Leu Ala Ile Lys Asn Ala Ala Gly Ala Leu Asp Leu Leu Lys Glu Leu
20 25 30

201

Lys Asn Ile Pro Met Thr Leu Glu Leu Leu Gln Ser Thr Arg Ile Gly
 35 40 45

Met Ser Val Asn Ala Ile Arg Lys Gln Ser Thr Asp Glu Glu Val Thr
 50 55 60

Ser Leu Ala Lys Ser Leu Ile Lys Ser Trp Lys Lys Leu Leu Asp Gly
 65 70 75 80

Pro Ser Thr Glu Lys Asp Leu Asp Glu Lys Lys Lys Glu Pro Ala Ile
 85 90 95

Thr Ser Gln Asn Ser Pro Glu Ala Arg Glu Glu Ser Thr Ser Ser Gly
 100 105 110

Asn Val Ser Asn Arg Lys Asp Glu Thr Asn Ala Arg Asp Thr Tyr Val
 115 120 125

Ser Ser Phe Pro Arg Ala Pro Ser Thr Ser Asp Ser Val Arg Leu Lys
 130 135 140

Cys Arg Glu Met Leu Ala Ala Ala Leu Arg Thr Gly Asp Asp Tyr Ile
 145 150 155 160

Ala Ile Gly Ala Asp Glu Glu Glu Leu Gly Ser Gln Ile Glu Glu Ala
 165 170 175

Ile Tyr Gln Glu Ile Arg Asn Thr Asp Met Lys Tyr Lys Asn Arg Val
 180 185 190

Arg Ser Arg Ile Ser Asn Leu Lys Asp Ala Lys Asn Pro Asn Leu Arg
 195 200 205

Lys Asn Val Leu Cys Gly Asn Ile Pro Pro Asp Leu Phe Ala Arg Met
 210 215 220

Thr Ala Glu Glu Met Ala Ser Asp Glu Leu Lys Glu Met Arg Lys Asn
 225 230 235 240

Leu Thr Lys Glu Ala Ile Arg Glu His Gln Met Ala Lys Thr Gly Gly
 245 250 255

Thr Gln Thr Asp Leu Phe Thr Cys Gly Lys Cys Lys Lys Lys Asn Cys
 260 265 270

Thr Tyr Thr Gln Val Gln Thr Arg Ser Ala Asp Glu Pro Met Thr Thr

202

275

280

285

Phe Val Val Cys Asn Glu Cys Gly Asn Arg Trp Lys Phe Cys
 290 295 300

<210> 143

<211> 225

<212> PRT

<213> Homo sapien

<400> 143

Met Val Ser His Ser Glu Leu Arg Lys Leu Phe Tyr Ser Ala Asp Ala
 1 5 10 15

Val Cys Phe Asp Val Asp Ser Thr Val Ile Arg Glu Glu Gly Ile Asp
 20 25 30

Glu Leu Ala Lys Ile Cys Gly Val Glu Asp Ala Val Ser Glu Met Thr
 35 40 45

Arg Arg Ala Met Gly Gly Ala Val Pro Phe Lys Ala Ala Leu Thr Glu
 50 55 60

Arg Leu Ala Leu Ile Gln Pro Ser Arg Glu Gln Val Gln Arg Leu Ile
 65 70 75 80

Ala Glu Gln Pro Pro His Leu Thr Pro Gly Ile Arg Glu Leu Val Ser
 85 90 95

Arg Leu Gln Glu Arg Asn Val Gln Val Phe Leu Ile Ser Gly Gly Phe
 100 105 110

Arg Ser Ile Val Glu His Val Ala Ser Lys Leu Asn Ile Pro Ala Thr
 115 120 125

Asn Val Phe Ala Asn Arg Leu Lys Phe Tyr Phe Asn Gly Glu Tyr Ala
 130 135 140

Gly Phe Asp Glu Thr Gln Pro Thr Ala Glu Ser Gly Gly Lys Gly Lys
 145 150 155 160

Val Ile Lys Leu Leu Lys Glu Lys Phe His Phe Lys Lys Ile Ile Met
 165 170 175

Ile Gly Asp Gly Ala Thr Asp Met Glu Ala Cys Pro Pro Ala Asp Ala
 180 185 190

203

Phe Ile Gly Phe Gly Gly Asn Val Ile Arg Gln Gln Val Lys Asp Asn
 195 200 205

Ala Lys Trp Tyr Ile Thr Asp Phe Val Glu Leu Leu Gly Glu Leu Glu
 210 215 220

Glu
 225

<210> 144
 <211> 249
 <212> PRT
 <213> Homo sapien

<400> 144

Met Lys Gln Thr Asn Ile Gln Lys Asn Thr Asn Thr Arg Asp Thr Ser
 1 5 10 15

Lys Lys Thr Lys Asp Gln Leu Ile Ile Asp Ala Gly Gln Lys His Phe
 20 25 30

Gly Ala Thr Val Cys Lys Ser Cys Gly Met Ile Tyr Thr Ala Ser Asn
 35 40 45

Pro Glu Asp Glu Met Gln His Val Gln His His His Arg Phe Leu Glu
 50 55 60

Gly Ile Lys Tyr Val Gly Trp Lys Lys Glu Arg Val Val Ala Glu Phe
 65 70 75 80

Trp Asp Gly Lys Ile Val Leu Val Leu Pro His Asp Pro Ser Phe Ala
 85 90 95

Ile Lys Lys Val Glu Asp Val Gln Glu Leu Val Asp Asn Glu Leu Gly
 100 105 110

Phe Gln Gln Val Val Pro Lys Cys Pro Asn Lys Ile Lys Thr Phe Leu
 115 120 125

Phe Ile Ser Asp Glu Lys Arg Val Val Gly Cys Leu Ile Ala Glu Pro
 130 135 140

Ile Lys Gln Ala Phe Arg Val Leu Ser Glu Pro Ile Gly Pro Glu Ser
 145 150 155 160

Pro Ser Ser Thr Glu Cys Pro Arg Ala Trp Gln Cys Ser Asp Val Pro

204

165 170 175

Glu Pro Ala Val Cys Gly Ile Ser Arg Ile Trp Val Phe Arg Leu Lys
 180 185 190

Arg Arg Lys Arg Ile Ala Arg Arg Leu Val Asp Thr Leu Arg Asn Cys
 195 200 205

Phe Met Phe Gly Cys Phe Leu Ser Thr Asp Glu Ile Ala Phe Ser Asp
 210 215 220

Pro Thr Pro Asp Gly Lys Leu Phe Ala Thr Lys Tyr Cys Asn Thr Pro
 225 230 235 240

Asn Phe Leu Val Tyr Asn Phe Asn Ser
 245

<210> 145
 <211> 113
 <212> PRT
 <213> Homo sapien

<400> 145

Met Lys Ser Phe Ser Lys Ser Ser Asn Lys Cys Thr Leu Asn Thr Ser
 1 5 10 15

Thr Val Arg Glu Phe Leu Ser Phe Arg Met Asn Ala Ile His Thr Lys
 20 25 30

Glu Leu Leu Leu Thr Ser His Leu Gln Ser Pro Pro Gly His Arg Gln
 35 40 45

Asp Pro Phe Asn Lys Ser Ser Ser Glu Thr Pro Ile Val Gln Asn Leu
 50 55 60

Gln Leu Ala Thr Gly Tyr His His Ser Leu Trp Leu Cys Lys Ile Lys
 65 70 75 80

Asp Leu Glu Glu Gly Trp Gly Gly Gly Ser Tyr Glu Lys Arg Gln Glu
 85 90 95

Lys Ser Ser Phe Asp Pro Met Leu Ser Glu Ser Val His Glu Glu Glu
 100 105 110

Ser

205

<210> 146
 <211> 102
 <212> PRT
 <213> Homo sapien

<400> 146

Met Val Thr Glu Glu Lys Arg Ser Glu Ala Arg Glu Asn Glu Arg Ser
 1 5 10 15

Leu Ala Phe Val Lys Met Val Gly His His Val Ala Phe Leu Glu Ala
 20 25 30

Asp Val Leu Gln Ala Glu Arg Asp His Gly Ala Phe Pro Gln Ala Leu
 35 40 45

Arg Arg Trp Leu Gly Ser Ala Gly Leu Pro Ser Phe Arg Asn Lys Ser
 50 55 60

Pro Ala Pro Val Pro Val Thr Tyr Glu Leu Pro Thr Leu Tyr Arg Thr
 65 70 75 80

Glu Asp Tyr Phe Pro Val Asp Ala Gly Glu Ala Gln His His Pro Arg
 85 90 95

Thr Cys Pro Arg Pro Leu
 100

<210> 147
 <211> 412
 <212> PRT
 <213> Homo sapien

<400> 147

Met Thr His Arg Arg Phe Lys Val Thr Ser Thr Val Ala Ala Ala Ser
 1 5 10 15

Leu Leu Pro Leu Gln Asp Glu Lys Glu Val Leu Leu Cys Lys Pro Ala
 20 25 30

Trp Leu Ser Pro Ser Gly Thr Arg Thr Gly Gly Phe Leu Ala Val Pro
 35 40 45

Gly Pro Pro Leu Arg Ala Lys Gly Pro Pro Val Leu Trp Pro Pro Pro
 50 55 60

Ala His Pro Pro Arg Val Pro Gly Arg Glu His Ser Arg Trp Gly Arg
 65 70 75 80

206

Ser Pro Pro Ala Gln Arg Ala Ala Leu Gly Leu Arg Pro Tyr Leu Leu
85 90 95

Leu Leu Leu Pro Pro Ala Gln Leu Phe Asn Val Tyr Pro Trp Leu Gly
100 105 110

Ala Leu Leu Gln Leu His Arg Pro Val Leu Arg Lys Ile Glu Glu Val
115 120 125

Arg Ala Ile Leu Arg Thr Leu Leu Glu Ala Arg Arg Pro His Val Cys
130 135 140

Pro Gly Asp Pro Val Cys Ser Tyr Val Asp Ala Leu Ile Gln Gln Gly
145 150 155 160

Gln Gly Asp Asp Pro Glu Gly Leu Phe Ala Glu Ala Asn Ala Val Ala
165 170 175

Cys Thr Leu Asp Met Val Met Ala Gly Thr Glu Thr Thr Ser Ala Thr
180 185 190

Leu Gln Trp Ala Ala Leu Leu Met Gly Arg His Pro Asp Val Gln Gly
195 200 205

Glu Thr Pro Ala Pro Gly Glu Thr Ala Pro Ser Ala Pro Gly Gly Pro
210 215 220

Pro Gly Thr Arg Asp Gly Ala Ala Thr Gln Ala Ala Gln Pro Phe Ala
225 230 235 240

Pro Gly Arg Val Gln Glu Glu Leu Asp Arg Val Leu Gly Pro Gly Arg
245 250 255

Thr Pro Arg Leu Glu Asp Gln Gln Ala Leu Pro Tyr Thr Ser Ala Val
260 265 270

Leu His Glu Val Gln Arg Phe Ile Thr Leu Leu Pro His Val Pro Arg
275 280 285

Cys Thr Ala Ala Asp Thr Gln Leu Gly Gly Phe Leu Leu Pro Lys Gly
290 295 300

Thr Pro Val Ile Pro Leu Leu Thr Ser Val Leu Leu Asp Glu Thr Gln
305 310 315 320

207

Trp Gln Thr Pro Gly Gln Phe Asn Pro Gly His Phe Leu Asp Ala Asn
 325 330 335

Gly His Phe Val Lys Arg Glu Ala Phe Leu Pro Phe Ser Ala Gly Arg
 340 345 350

Arg Val Cys Val Gly Glu Arg Leu Ala Arg Thr Glu Leu Phe Leu Leu
 355 360 365

Phe Ala Gly Leu Leu Gln Arg Tyr Arg Leu Leu Pro Pro Pro Gly Val
 370 375 380

Ser Pro Ala Ser Leu Asp Thr Thr Pro Ala Arg Ala Phe Thr Met Arg
 385 390 395 400

Pro Arg Ala Gln Ala Leu Cys Ala Val Pro Arg Pro
 405 410

<210> 148
 <211> 203
 <212> PRT
 <213> Homo sapien

<400> 148

Asp Pro Gly Ala Trp Arg Asp Gly Ser Phe Cys Pro Arg Gly Thr Pro
 1 5 10 15

Arg Asp Glu Gly Trp Arg Cys His Pro Ser Gly Pro Pro Phe Ala Pro
 20 25 30

Gly Arg Val Gln Glu Glu Leu Asp Arg Val Leu Gly Pro Gly Arg Thr
 35 40 45

Pro Arg Leu Glu Asp Gln Gln Ala Leu Pro Tyr Thr Ser Ala Val Leu
 50 55 60

His Glu Val Gln Arg Phe Ile Thr Leu Leu Pro His Val Pro Arg Cys
 65 70 75 80

Thr Ala Ala Asp Thr Gln Leu Gly Gly Phe Leu Leu Pro Lys Gly Thr
 85 90 95

Pro Val Ile Pro Leu Leu Thr Ser Val Leu Leu Asp Glu Thr Gln Trp
 100 105 110

Gln Thr Pro Gly Gln Phe Asn Pro Gly His Phe Leu Asp Ala Asn Gly

208

115

120

125

His Phe Val Lys Arg Glu Ala Phe Leu Pro Phe Ser Ala Gly Arg Arg
 130 135 140

Val Cys Val Gly Glu Arg Leu Ala Arg Thr Glu Leu Phe Leu Leu Phe
 145 150 155 160

Ala Gly Leu Leu Gln Arg Tyr Arg Leu Leu Pro Pro Pro Gly Val Ser
 165 170 175

Pro Ala Ser Leu Asp Thr Thr Pro Ala Arg Ala Phe Thr Met Arg Pro
 180 185 190

Arg Ala Gln Ala Leu Cys Ala Val Pro Arg Pro
 195 200

<210> 149
 <211> 116
 <212> PRT
 <213> Homo sapien

<400> 149

Met Ala Arg Asp Ile Val Ala Met Ser Arg Ala Met Cys Leu Met Leu
 1 5 10 15

Leu Ser Val Ala Arg Ala Phe Leu Leu Met Val Val Arg Thr Glu Glu
 20 25 30

Val Ala Gly Phe Arg Trp Pro Asp Leu Arg Phe Asn Asp His His Asp
 35 40 45

Thr Phe Ala Val Gly Cys Arg Leu His Ala His Ser Leu Ala Val Asn
 50 55 60

Gln Ser Val Val Ala Glu Gly Ile Ala Gly Pro Gln Val Ile Gly Leu
 65 70 75 80

Ser Ala Val Val Phe Gly Leu Ser Phe Glu Asn Met Glu Asn Trp Ser
 85 90 95

Ser Ser Ala Arg Pro Ile Gln Leu Leu Met Pro Glu His Arg Tyr Ala
 100 105 110

Asp Ile Arg Gln
 115

209

<210> 150

<211> 141

<212> PRT

<213> Homo sapien

<400> 150

Gly Glu Arg Pro Leu Ser Trp Ser Pro Leu Gly Arg Gly His Leu Cys
 1 5 10 15

Leu Val Pro Leu Gly Gly Arg Arg Gly Ala Cys Ala Gly Lys Ser Arg
 20 25 30

Arg Pro Arg Trp Ala Asp His Glu Val Arg Ser Ser Arg Pro Ala Trp
 35 40 45

Pro Thr Trp His Thr Trp His Ala His Arg Gly Asp Val Ala Cys His
 50 55 60

Val Ser Asp Ala Ala Glu Arg Gly Ala Ser Ile Leu Val Asp Gly Gly
 65 70 75 80

Pro His Ile Gly Gly Gly Arg Leu Pro Leu Ala Gly Ser Pro Leu Asn
 85 90 95

Asp His His Asp Thr Phe Ala Val Gly Cys Arg Leu His Ala His Ser
 100 105 110

Leu Ala Val Asn Gln Ser Val Val Ala Glu Gly Ile Ala Gly Pro Gln
 115 120 125

Val Ile Gly Leu Ser Ala Val Val Phe Gly Leu Ser Phe
 130 135 140

<210> 151

<211> 426

<212> PRT

<213> Homo sapien

<400> 151

Met Ser Pro Ala Pro Asp Ala Ala Pro Ala Pro Ala Ser Ile Ser Leu
 1 5 10 15

Phe Asp Leu Ser Ala Asp Ala Pro Val Phe Gln Gly Leu Ser Leu Val
 20 25 30

Ser His Ala Pro Gly Glu Ala Leu Ala Arg Ala Pro Arg Thr Ser Cys
 35 40 45

210

Ser Gly Ser Gly Glu Arg Glu Ser Pro Glu Arg Lys Leu Leu Gln Gly
 50 55 60

Pro Met Asp Ile Ser Glu Lys Leu Phe Cys Ser Thr Cys Asp Gln Thr
 65 70 75 80

Phe Gln Asn His Gln Glu Gln Arg Glu His Tyr Lys Leu Asp Trp His
 85 90 95

Arg Phe Asn Leu Lys Gln Arg Leu Lys Asp Lys Pro Leu Leu Ser Ala
 100 105 110

Leu Asp Phe Glu Lys Gln Ser Ser Thr Gly Asp Leu Ser Ser Ile Ser
 115 120 125

Gly Ser Glu Asp Ser Asp Ser Ala Ser Glu Glu Asp Leu Gln Thr Leu
 130 135 140

Asp Arg Glu Arg Ala Thr Phe Glu Lys Leu Ser Arg Pro Pro Gly Phe
 145 150 155 160

Tyr Pro His Arg Val Leu Phe Gln Asn Ala Gln Gly Gln Phe Leu Tyr
 165 170 175

Ala Tyr Arg Cys Val Leu Gly Pro His Gln Asp Pro Pro Glu Glu Ala
 180 185 190

Glu Leu Leu Leu Gln Asn Leu Gln Ser Arg Gly Pro Arg Asp Cys Val
 195 200 205

Val Leu Met Ala Ala Ala Gly His Phe Ala Gly Ala Ile Phe Gln Gly
 210 215 220

Arg Glu Val Val Thr His Lys Thr Phe His Arg Tyr Thr Val Arg Ala
 225 230 235 240

Lys Arg Gly Thr Ala Gln Gly Leu Arg Asp Ala Arg Gly Gly Pro Ser
 245 250 255

His Ser Ala Gly Ala Asn Leu Arg Arg Tyr Asn Glu Ala Thr Leu Tyr
 260 265 270

Lys Asp Val Arg Asp Leu Leu Ala Gly Pro Ser Trp Ala Lys Ala Leu
 275 280 285

211

Glu Glu Ala Gly Thr Ile Leu Leu Arg Ala Pro Arg Ser Gly Arg Ser
 290 295 300

Leu Phe Phe Gly Gly Lys Gly Ala Pro Leu Gln Arg Gly Asp Pro Arg
 305 310 315 320

Leu Trp Asp Ile Pro Leu Ala Thr Arg Arg Pro Thr Phe Gln Glu Leu
 325 330 335

Gln Arg Val Leu His Lys Leu Thr Thr Leu His Val Tyr Glu Glu Asp
 340 345 350

Pro Arg Glu Ala Val Arg Leu His Ser Pro Gln Thr His Trp Lys Thr
 355 360 365

Val Arg Glu Glu Arg Lys Lys Pro Thr Glu Glu Glu Ile Arg Lys Ile
 370 375 380

Cys Arg Asp Glu Lys Glu Ala Leu Gly Gln Asn Glu Glu Ser Pro Lys
 385 390 395 400

Gln Gly Leu Ile Thr Ile Trp Gln Leu Ser Asp Leu Ser Phe Cys Pro
 405 410 415

Lys Asn Ala Leu Ala Asn Ser Leu Leu Ser
 420 425

<210> 152
 <211> 370
 <212> PRT
 <213> Homo sapien

<400> 152

Met Ser Pro Ala Pro Asp Ala Ala Pro Ala Pro Ala Ser Ile Ser Leu
 1 5 10 15

Phe Asp Leu Ser Ala Asp Ala Pro Val Phe Gln Gly Leu Ser Leu Arg
 20 25 30

Glu His Tyr Lys Leu Asp Trp His Arg Phe Asn Leu Lys Gln Arg Leu
 35 40 45

Lys Asp Lys Pro Leu Leu Ser Ala Leu Asp Phe Glu Lys Gln Ser Ser
 50 55 60

Thr Gly Asp Leu Ser Ser Ile Ser Gly Ser Glu Asp Ser Asp Ser Ala

212

65		70		75		80									
Ser	Glu	Glu	Asp	Leu	Gln	Thr	Leu	Asp	Arg	Glu	Arg	Ala	Thr	Phe	Glu
			85						90					95	
Lys	Leu	Ser	Arg	Pro	Pro	Gly	Phe	Tyr	Pro	His	Arg	Val	Leu	Phe	Gln
			100					105					110		
Asn	Ala	Gln	Gly	Gln	Phe	Leu	Tyr	Ala	Tyr	Arg	Cys	Val	Leu	Gly	Pro
		115						120					125		
His	Gln	Asp	Pro	Pro	Glu	Glu	Ala	Glu	Leu	Leu	Leu	Gln	Asn	Leu	Gln
		130						135				140			
Ser	Arg	Gly	Pro	Arg	Asp	Cys	Val	Val	Leu	Met	Ala	Ala	Ala	Gly	His
	145				150					155					160
Phe	Ala	Gly	Ala	Ile	Phe	Gln	Gly	Arg	Glu	Val	Val	Thr	His	Lys	Thr
			165						170					175	
Phe	His	Arg	Tyr	Thr	Val	Arg	Ala	Lys	Arg	Gly	Thr	Ala	Gln	Gly	Leu
			180					185					190		
Arg	Asp	Ala	Arg	Gly	Gly	Pro	Ser	His	Ser	Ala	Gly	Ala	Asn	Leu	Arg
		195						200				205			
Arg	Tyr	Asn	Glu	Ala	Thr	Leu	Tyr	Lys	Asp	Val	Arg	Asp	Leu	Leu	Ala
	210							215				220			
Gly	Pro	Ser	Trp	Ala	Lys	Ala	Leu	Glu	Glu	Ala	Gly	Thr	Ile	Leu	Leu
	225				230					235				240	
Arg	Ala	Pro	Arg	Ser	Gly	Arg	Ser	Leu	Phe	Phe	Gly	Gly	Lys	Gly	Ala
				245					250					255	
Pro	Leu	Gln	Arg	Gly	Asp	Pro	Arg	Leu	Trp	Asp	Ile	Pro	Leu	Ala	Thr
			260					265					270		
Arg	Arg	Pro	Thr	Phe	Gln	Glu	Leu	Gln	Arg	Val	Leu	His	Lys	Leu	Thr
			275					280				285			
Thr	Leu	His	Val	Tyr	Glu	Glu	Asp	Pro	Arg	Glu	Ala	Val	Arg	Leu	His
	290							295				300			
Ser	Pro	Gln	Thr	His	Trp	Lys	Thr	Val	Arg	Glu	Glu	Arg	Lys	Lys	Pro
	305				310					315					320

Thr Glu Glu Glu Ile Arg Lys Ile Cys Arg Asp Glu Lys Glu Ala Leu
325 330 335

Gly Gln Asn Glu Glu Ser Pro Lys Gln Gly Leu Ile Thr Ile Trp Gln
340 345 350

Leu Ser Asp Leu Ser Phe Cys Pro Lys Asn Ala Leu Ala Asn Ser Leu
355 360 365

Leu Ser
370

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<210> 153
<211> 208
<212> PRT
<213> Homo sapien
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<400> 153

Met Ser Pro Ala Pro Asp Ala Ala Pro Ala Pro Ala Ser Ile Ser Leu
1 5 10 15

Phe Asp Leu Ser Ala Asp Ala Pro Val Phe Gln Gly Leu Ser Leu Val
20 25 30

Ser His Ala Pro Gly Glu Ala Leu Ala Arg Ala Pro Arg Thr Ser Cys
35 40 45

Ser Gly Ser Gly Glu Arg Glu Ser Pro Glu Arg Lys Leu Leu Gln Gly
50 55 60

Pro Met Asp Ile Ser Glu Lys Leu Phe Cys Ser Thr Cys Asp Gln Thr
65 70 75 80

Phe Gln Asn His Gln Glu Gln Arg Glu His Tyr Lys Leu Asp Trp His
85 90 95

Arg Phe Asn Leu Lys Gln Arg Leu Lys Asp Lys Pro Leu Leu Ser Ala
100 105 110

Leu Asp Phe Glu Lys Gln Ser Ser Thr Gly Asp Leu Ser Ser Ile Ser
115 120 125

Gly Ser Glu Asp Ser Asp Ser Ala Ser Glu Glu Asp Leu Gln Thr Leu
130 135 140

214

Asp Arg Glu Arg Ala Thr Phe Glu Lys Leu Ser Arg Pro Pro Gly Phe
 145 150 155 160

Tyr Pro His Arg Val Leu Phe Gln Asn Ala Gln Gly Gln Phe Leu Tyr
 165 170 175

Ala Tyr Arg Cys Val Leu Gly Pro His Gln Arg Gln Val Thr Val Gln
 180 185 190

Val Ala Trp Leu Thr Pro Ala Phe Cys Thr Pro Ser Leu Asp Phe Pro
 195 200 205

<210> 154

<211> 209

<212> PRT

<213> Homo sapien

<400> 154

Trp Thr Gln Leu Leu Met Cys Tyr Phe Tyr Leu Gly Asp Lys Ile Lys
 1 5 10 15

Thr Ile Ser Phe Gln Ala Phe Ile Leu Met His Leu Leu Leu Pro Ser
 20 25 30

Glu Tyr Ser Leu Asp Gly Phe His Met Ser Gly Phe Ser Leu Gly Ser
 35 40 45

Gly Ser Glu Gly Glu Asp Gly Phe Gln Val Glu Leu Glu Leu Val Glu
 50 55 60

Leu Thr Val Gly Thr Leu Asp Leu Cys Glu Ser Glu Val Leu Pro Lys
 65 70 75 80

Arg Arg Arg Arg Lys Arg Asn Lys Lys Glu Lys Ser Arg Asp Gln Glu
 85 90 95

Ala Gly Ala His Arg Thr Leu Leu Gln Gln Thr Gln Glu Glu Glu Pro
 100 105 110

Ser Thr Gln Ser Ser Gln Ala Val Ala Ala Pro Leu Gly Pro Leu Leu
 115 120 125

Asp Glu Ala Lys Ala Pro Gly Gln Pro Glu Leu Trp Asn Ala Leu Leu
 130 135 140

Ala Ala Cys Arg Ala Gly Asp Val Gly Val Leu Lys Leu Gln Leu Ala
 145 150 155 160

215

Pro Ser Pro Ala Asp Pro Arg Val Leu Ser Leu Leu Ser Ala Pro Leu
 165 170 175

Gly Ser Gly Gly Phe Thr Leu Leu His Ala Ala Ala Ala Ala Gly Arg
 180 185 190

Gly Ser Val Val Arg Leu Leu Leu Glu Ala Gly Ala Asp Pro Thr Val
 195 200 205

Gln

<210> 155
 <211> 125
 <212> PRT
 <213> Homo sapien

<400> 155

Met Ser Pro Ala Pro Asp Ala Ala Pro Ala Pro Ala Ser Ile Ser Leu
 1 5 10 15

Phe Asp Leu Ser Ala Asp Ala Pro Val Phe Gln Gly Leu Ser Leu Val
 20 25 30

Ser His Ala Pro Gly Glu Ala Leu Ala Arg Ala Pro Arg Thr Ser Cys
 35 40 45

Ser Gly Ser Gly Glu Arg Glu Ser Pro Glu Arg Lys Leu Leu Gln Gly
 50 55 60

Pro Met Asp Ile Ser Glu Lys Leu Phe Cys Ser Thr Cys Asp Gln Thr
 65 70 75 80

Phe Gln Asn His Gln Glu Gln Arg Glu His Tyr Lys Leu Asp Trp His
 85 90 95

Arg Phe Asn Leu Lys Gln Arg Leu Lys Asp Lys Pro Leu Leu Ser Ala
 100 105 110

Leu Asp Phe Glu Lys Gln Ser Ser Thr Gly Asp Glu Trp
 115 120 125

<210> 156
 <211> 191
 <212> PRT
 <213> Homo sapien

216

<400> 156

Glu Pro Ser Leu Asp Arg Pro Gly Asp Asp Gln Leu Val Leu Gly Gly
 1 5 10 15

Gly Leu Cys Arg Val Glu Gly Ser Gln Val Pro Val Pro Ala Leu Ser
 20 25 30

Pro Ala Thr Ala Pro Thr Ser Phe Glu Gly Pro Phe Gly Lys Ile Val
 35 40 45

His Gln Val Arg Ala Ala Ile His Thr Pro Arg Phe Ser Lys Asp His
 50 55 60

Lys Cys Ser Leu Val Phe Tyr Ile Leu Ser Pro His Phe Leu Asp Pro
 65 70 75 80

Val Phe Leu Ser Thr Lys Ser His Ser Gln Arg Gln Pro Leu Leu Ala
 85 90 95

Thr Leu Ser Ser Val Pro Gly Ala Pro Glu Pro Cys Pro Gln Asp Gly
 100 105 110

Ser Pro Ala Ser His Pro Leu His Pro Pro Leu Cys Ile Ser Thr Gly
 115 120 125

Ala Thr Val Pro Tyr Phe Ala Glu Gly Ser Gly Gly Pro Val Pro Thr
 130 135 140

Thr Ser Thr Leu Ile Leu Pro Pro Glu Tyr Ser Ser Trp Gly Tyr Pro
 145 150 155 160

Tyr Gly Glu Ser Thr Ala Arg Ala Trp Gln Gly Gly Asp Ala Lys Ser
 165 170 175

Pro Thr Gln Thr Leu Leu Ser Ser Arg Arg Gly Pro Thr Val Leu
 180 185 190

<210> 157

<211> 130

<212> PRT

<213> Homo sapien

<400> 157

Met Gly Cys Leu Leu Thr Gly Leu Pro Arg Thr Leu Pro Arg Trp Cys
 1 5 10 15

217

Cys Leu Ala Pro Gly Arg Ile Pro Val Leu Ala Ala Ser Arg Gly Leu
 20 25 30

Gly Arg Arg Leu Ala Gly Ala His Ala Ala Ile Pro Phe Ala Ala Ile
 35 40 45

Arg Val Thr Cys Ile Gly Ser Cys Gly Val Ser Asn Lys Ala Asn Asp
 50 55 60

Thr Ala Trp Val Val Glu Glu Gly Tyr Phe Asn Ser Ser Leu Ser Leu
 65 70 75 80

Ala Asp Lys Gly Lys Phe Gly Ser Gln Phe Pro Ser Gly Asp Pro Trp
 85 90 95

Gly Gln Pro Leu Glu Trp Gly Leu Ser Val Leu Ser Ser Pro Phe Pro
 100 105 110

Arg Ser Ala Ser Trp Ile Trp His Trp Pro Ile Leu Ser Gln Gly Cys
 115 120 125

Gly Pro
 130

<210> 158
 <211> 340
 <212> PRT
 <213> Homo sapien

<400> 158

Pro Gly Glu Ala His Phe Arg Glu Asp His Trp Pro Ala Ala Gly Pro
 1 5 10 15

Thr Arg Arg Arg Ser Ser Arg Pro Gly Val Pro Leu Gln Gly Ala Glu
 20 25 30

Glu Asp Gly Ala Leu Trp Lys Gly Ala Arg Gly Phe Asn Gly Val Gln
 35 40 45

Leu Phe Glu Gly Met Lys Ala Phe Lys Gly Lys Asp Gln Gln Val Arg
 50 55 60

Leu Phe Arg Pro Trp Leu Asn Met Asp Arg Met Leu Arg Ser Ala Met
 65 70 75 80

Arg Leu Cys Leu Pro Ser Phe Asp Lys Leu Glu Leu Leu Glu Cys Ile

218

85	90	95
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Arg Arg Leu Ile Glu Val Asp Lys Asp Trp Val Pro Asp Ala Ala Gly
 100 105 110

Thr Ser Leu Tyr Val Arg Pro Val Leu Ile Gly Asn Glu Pro Ser Leu
 115 120 125

Gly Val Ser Gln Pro Thr Arg Ala Leu Leu Phe Val Ile Leu Cys Pro
 130 135 140

Val Gly Ala Tyr Phe Pro Gly Gly Ser Val Thr Pro Val Ser Leu Leu
 145 150 155 160

Ala Asp Pro Ala Phe Ile Arg Ala Trp Val Gly Gly Val Gly Asn Tyr
 165 170 175

Lys Leu Gly Gly Asn Tyr Gly Pro Thr Val Leu Val Gln Gln Glu Ala
 180 185 190

Leu Lys Arg Gly Cys Glu Gln Val Leu Trp Leu Tyr Gly Pro Asp His
 195 200 205

Gln Leu Thr Glu Val Gly Thr Met Asn Ile Phe Val Tyr Trp Thr His
 210 215 220

Glu Asp Gly Val Leu Glu Leu Val Thr Pro Pro Leu Asn Gly Val Ile
 225 230 235 240

Leu Pro Gly Val Val Arg Gln Ser Leu Leu Asp Met Ala Gln Thr Trp
 245 250 255

Gly Glu Phe Arg Val Val Glu Arg Thr Ile Thr Met Lys Gln Leu Leu
 260 265 270

Arg Ala Leu Glu Glu Gly Arg Val Arg Glu Val Phe Gly Ser Gly Thr
 275 280 285

Ala Cys Gln Val Cys Pro Val His Arg Ile Leu Tyr Lys Asp Arg Asn
 290 295 300

Leu His Ile Pro Thr Met Glu Asn Gly Pro Glu Leu Ile Leu Arg Phe
 305 310 315 320

Gln Lys Glu Leu Lys Glu Ile Gln Tyr Gly Ile Arg Ala His Glu Trp
 325 330 335

219

Met Phe Pro Val
340

<210> 159
<211> 306
<212> PRT
<213> Homo sapien

<400> 159

Met Ala Pro Phe Gly Lys Glu His Glu Ala Leu Met Gly Glu Leu Phe
1 5 10 15

Glu Gly Met Lys Ala Phe Lys Gly Lys Asp Gln Gln Val Arg Leu Phe
20 25 30

Arg Pro Trp Leu Asn Met Asp Arg Met Leu Arg Ser Ala Met Arg Leu
35 40 45

Cys Leu Pro Ser Phe Asp Lys Leu Glu Leu Leu Glu Cys Ile Arg Arg
50 55 60

Leu Ile Glu Val Asp Lys Asp Trp Val Pro Asp Ala Ala Gly Thr Ser
65 70 75 80

Leu Tyr Val Arg Pro Val Leu Ile Gly Asn Glu Pro Ser Leu Gly Val
85 90 95

Ser Gln Pro Thr Arg Ala Leu Leu Phe Val Ile Leu Cys Pro Val Gly
100 105 110

Ala Tyr Phe Pro Gly Gly Ser Val Thr Pro Val Ser Leu Leu Ala Asp
115 120 125

Pro Ala Phe Ile Arg Ala Trp Val Gly Gly Val Gly Asn Tyr Lys Leu
130 135 140

Gly Gly Asn Tyr Gly Pro Thr Val Leu Val Gln Gln Glu Ala Leu Lys
145 150 155 160

Arg Gly Cys Glu Gln Val Leu Trp Leu Tyr Gly Pro Asp His Gln Leu
165 170 175

Thr Glu Val Gly Thr Met Asn Ile Phe Val Tyr Trp Thr His Glu Asp
180 185 190

220

Gly Val Leu Glu Leu Val Thr Pro Pro Leu Asn Gly Val Ile Leu Pro
 195 200 205

Gly Val Val Arg Gln Ser Leu Leu Asp Met Ala Gln Thr Trp Gly Glu
 210 215 220

Phe Arg Val Val Glu Arg Thr Ile Thr Met Lys Gln Leu Leu Arg Ala
 225 230 235 240

Leu Glu Glu Gly Arg Val Arg Glu Val Phe Gly Ser Gly Thr Ala Cys
 245 250 255

Gln Val Cys Pro Val His Arg Ile Leu Tyr Lys Asp Arg Asn Leu His
 260 265 270

Ile Pro Thr Met Glu Asn Gly Pro Glu Leu Ile Leu Arg Phe Gln Lys
 275 280 285

Glu Leu Lys Glu Ile Gln Tyr Gly Ile Arg Ala His Glu Trp Met Phe
 290 295 300

Pro Val
 305

<210> 160
 <211> 485
 <212> PRT
 <213> Homo sapien

<400> 160

Gln Ile Val Tyr Leu Tyr Ile Gln Arg Ile Ile Arg Val Phe His Gly
 1 5 10 15

Val Asn Ala Pro Asp Asn Pro Leu Lys Glu Glu His Leu Val Gln Leu
 20 25 30

Asn Glu Thr Asp Ile Leu Arg Val Leu Asp Gly Asn Thr Gly Gly Thr
 35 40 45

Tyr Gly Gly His Ile Pro Gly Ser Asp Arg Ala Gly Leu Asn Arg His
 50 55 60

Asp Lys Ser Glu Asn Pro Gly Arg Ile Tyr Ala Gly Gly Ser Ser Thr
 65 70 75 80

Ala Ala Gly Asp Pro Ser Leu Leu Ser Ala Ala Arg Ile Met Ala Ala
 85 90 95

221

Ala Ala Leu Gly Gln Ile Trp Ala Arg Lys Leu Leu Ser Val Pro Trp
 100 105 110

Leu Leu Cys Gly Pro Arg Arg Tyr Ala Ser Ser Ser Phe Lys Ala Ala
 115 120 125

Asp Leu Gln Leu Glu Met Thr Gln Lys Pro His Lys Lys Pro Gly Pro
 130 135 140

Gly Glu Pro Leu Val Phe Gly Lys Thr Phe Thr Asp His Met Leu Met
 145 150 155 160

Val Glu Trp Asn Asp Lys Gly Trp Gly Gln Pro Arg Ile Gln Pro Phe
 165 170 175

Gln Asn Leu Thr Leu His Pro Ala Ser Ser Ser Leu His Tyr Ser Leu
 180 185 190

Gln Leu Phe Glu Gly Met Lys Ala Phe Lys Gly Lys Asp Gln Gln Val
 195 200 205

Arg Leu Phe Arg Pro Trp Leu Asn Met Asp Arg Met Leu Arg Ser Ala
 210 215 220

Met Arg Leu Cys Leu Pro Ser Phe Asp Lys Leu Glu Leu Leu Glu Cys
 225 230 235 240

Ile Arg Arg Leu Ile Glu Val Asp Lys Asp Trp Val Pro Asp Ala Ala
 245 250 255

Gly Thr Ser Leu Tyr Val Arg Pro Val Leu Ile Gly Asn Glu Pro Ser
 260 265 270

Leu Gly Val Ser Gln Pro Thr Arg Ala Leu Leu Phe Val Ile Leu Cys
 275 280 285

Pro Val Gly Ala Tyr Phe Pro Gly Gly Ser Val Thr Pro Val Ser Leu
 290 295 300

Leu Ala Asp Pro Ala Phe Ile Arg Ala Trp Val Gly Gly Val Gly Asn
 305 310 315 320

Tyr Lys Leu Gly Gly Asn Tyr Gly Pro Thr Val Leu Val Gln Gln Glu
 325 330 335

222

Ala Leu Lys Arg Gly Cys Glu Gln Val Leu Trp Leu Tyr Gly Pro Asp
 340 345 350

His Gln Leu Thr Glu Val Gly Thr Met Asn Ile Phe Val Tyr Trp Thr
 355 360 365

His Glu Asp Gly Val Leu Glu Leu Val Thr Pro Pro Leu Asn Gly Val
 370 375 380

Ile Leu Pro Gly Val Val Arg Gln Ser Leu Leu Asp Met Ala Gln Thr
 385 390 395 400

Trp Val Arg Thr Trp His Leu Leu Val Met Gly Ala Met Cys Gln Gly
 405 410 415

Pro Gly His Gln Arg Ala Gly Thr Gly Ala His Trp His Val Ser Ala
 420 425 430

Pro Ser Pro Gly Ser Val Ser Pro Val Gly Pro Leu Ser Phe Ser Leu
 435 440 445

Ser Ser Gly Arg Glu Arg Trp Arg Ser Ala Ala Gly Gln Pro Ser Gly
 450 455 460

Asp Thr Cys Leu Cys Gln Leu Pro Cys Arg Val Ser Ser Gly Trp Trp
 465 470 475 480

Ser Ala Arg Ser Pro
 485

<210> 161
 <211> 465
 <212> PRT
 <213> Homo sapien

<400> 161

Met Ala Ala Ala Ala Leu Gly Gln Ile Trp Ala Arg Lys Leu Leu Ser
 1 5 10 15

Val Pro Trp Leu Leu Cys Gly Pro Arg Arg Tyr Ala Ser Ser Ser Phe
 20 25 30

Lys Ala Ala Asp Leu Gln Leu Glu Met Thr Gln Lys Pro His Lys Lys
 35 40 45

Pro Gly Pro Gly Glu Pro Leu Val Phe Gly Lys Thr Phe Thr Asp His

223

50	55	60
Met Leu Met Val Glu Trp Asn Asp Lys Gly Trp Gly Gln Pro Arg Ile		
65	70	75 80
Gln Pro Phe Gln Asn Leu Thr Leu His Pro Ala Ser Ser Ser Leu His		
	85	90 95
Tyr Ser Leu Gln Leu Phe Glu Gly Met Lys Ala Phe Lys Gly Lys Asp		
	100	105 110
Gln Gln Val Arg Leu Phe Arg Pro Trp Leu Asn Met Asp Arg Met Leu		
	115	120 125
Arg Ser Ala Met Arg Leu Cys Leu Pro Ser Phe Asp Lys Leu Glu Leu		
	130	135 140
Leu Glu Cys Ile Arg Arg Leu Ile Glu Val Asp Lys Asp Trp Val Pro		
145	150	155 160
Asp Ala Ala Gly Thr Ser Leu Tyr Val Arg Pro Val Leu Ile Gly Asn		
	165	170 175
Glu Pro Ser Leu Gly Val Ser Gln Pro Thr Arg Ala Leu Leu Phe Val		
	180	185 190
Ile Leu Cys Pro Val Gly Ala Tyr Phe Pro Gly Gly Ser Val Thr Pro		
	195	200 205
Val Ser Leu Leu Ala Asp Pro Ala Phe Ile Arg Ala Trp Val Gly Gly		
	210	215 220
Val Gly Asn Tyr Lys Leu Gly Gly Asn Tyr Gly Pro Thr Val Leu Val		
225	230	235 240
Gln Gln Glu Ala Leu Lys Arg Gly Cys Glu Gln Val Leu Trp Leu Tyr		
	245	250 255
Gly Pro Asp His Gln Leu Thr Glu Val Gly Thr Met Asn Ile Phe Val		
	260	265 270
Tyr Trp Thr His Glu Asp Gly Val Leu Glu Leu Val Thr Pro Pro Leu		
	275	280 285
Asn Gly Val Ile Leu Pro Gly Val Val Arg Gln Ser Leu Leu Asp Met		
	290	295 300

224

Ala Gln Thr Trp Val Glu Asp Met Ala Ser Ser Gly Asp Gly Arg His
305 310 315 320

Val Pro Gly Ala Arg Ala Ser Glu Gly Trp Asp Trp Gly Thr Leu Ala
325 330 335

Cys Leu Cys Pro Phe Ser Trp Val Cys Leu Ser Arg Trp Ala Ser Val
340 345 350

Phe Leu Thr Ile Leu Arg Glu Gly Glu Val Glu Val Cys Ser Arg Ala
355 360 365

Thr Leu Trp Gly His Val Ser Leu Pro Thr Ala Leu Gln Gly Glu Phe
370 375 380

Arg Val Val Glu Arg Thr Ile Thr Met Lys Gln Leu Leu Arg Ala Leu
385 390 395 400

Glu Glu Gly Arg Val Arg Glu Val Phe Gly Ser Gly Thr Ala Cys Gln
405 410 415

Val Cys Pro Val His Arg Ile Leu Tyr Lys Asp Arg Asn Leu His Ile
420 425 430

Pro Thr Met Glu Asn Gly Pro Glu Leu Ile Leu Arg Phe Gln Lys Glu
435 440 445

Leu Lys Glu Ile Gln Tyr Gly Ile Arg Ala His Glu Trp Met Phe Pro
450 455 460

Val
465

<210> 162
<211> 74
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (3)..(5)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (8)..(10)
<223> X=any amino acid

225

<220>
 <221> MISC_FEATURE
 <222> (13)..(14)
 <223> X=any amino acid

<400> 162

Thr Leu Xaa Xaa Xaa Phe Asn Xaa Xaa Xaa Ser Ser Xaa Xaa Lys Ile
 1 5 10 15

Arg Lys Asn Thr Ala Ser Tyr Val Pro Lys Glu Lys Lys Ile Lys Gly
 20 25 30

Thr Met Pro Thr Cys Ser Thr Ile Lys Ala Ser Phe Ser Tyr Phe Phe
 35 40 45

Asn Thr Lys Tyr Lys Gln Arg Ile His Ile Leu Lys Thr Glu Leu Arg
 50 55 60

Ser Arg His Ala Val Leu Glu Thr Leu Gln
 65 70

<210> 163
 <211> 63
 <212> PRT
 <213> Homo sapien

<400> 163

Thr Arg Val Leu Gln Cys Ala Pro Arg Cys Ser Pro Asn Cys Val Ala
 1 5 10 15

Phe Thr Ala Ala Val Thr Val Pro Ala Cys Ile Tyr Ala Leu Phe Gly
 20 25 30

Pro Cys Glu His Thr Gly Ile Leu Val Ile Leu Pro Pro Met Glu Tyr
 35 40 45

Leu Trp Arg Ser Pro Val Phe Ile Tyr Phe Gly Ile Asn Pro Leu
 50 55 60

<210> 164
 <211> 313
 <212> PRT
 <213> Homo sapien

<400> 164

Met Lys Cys Glu His Cys Thr Arg Lys Glu Cys Ser Lys Lys Thr Lys

226

1	5	10	15
Thr Asp Asp Gln Glu Asn Val Ser Ala Asp Ala Pro Ser Pro Ala Gln	20	25	30
Glu Asn Gly Glu Lys Gly Glu Phe His Lys Leu Ala Asp Ala Lys Ile	35	40	45
Phe Leu Ser Asp Cys Leu Ala Cys Asp Ser Cys Met Thr Ala Glu Glu	50	55	60
Gly Val Gln Leu Ser Gln Gln Asn Ala Lys Asp Phe Phe Arg Val Leu	65	70	75
Asn Leu Asn Lys Lys Cys Asp Thr Ser Lys His Lys Val Leu Val Val	85	90	95
Ser Val Cys Pro Gln Ser Leu Pro Tyr Phe Ala Ala Lys Phe Asn Leu	100	105	110
Ser Val Thr Asp Ala Ser Arg Arg Leu Cys Gly Phe Leu Lys Ser Leu	115	120	125
Gly Val His Tyr Val Phe Asp Thr Thr Ile Ala Ala Asp Phe Ser Ile	130	135	140
Leu Glu Ser Gln Lys Glu Phe Val Arg Arg Tyr Arg Gln His Ser Glu	145	150	155
Glu Glu Arg Thr Leu Pro Met Leu Thr Ser Ala Cys Pro Gly Trp Val	165	170	175
Arg Tyr Ala Glu Arg Val Leu Gly Arg Pro Ile Thr Ala His Leu Cys	180	185	190
Thr Ala Lys Ser Pro Gln Gln Val Met Gly Ser Leu Val Lys Asp Tyr	195	200	205
Phe Ala Arg Gln Gln Asn Leu Ser Pro Glu Lys Ile Phe His Val Ile	210	215	220
Val Ala Pro Cys Tyr Asp Lys Lys Leu Glu Ala Leu Gln Glu Ser Leu	225	230	235
Pro Pro Ala Leu His Gly Ser Arg Gly Ala Asp Cys Val Leu Thr Ser	245	250	255

227

Gly Glu Ile Ala Gln Ile Met Glu Gln Gly Asp Leu Ser Val Arg Asp
 260 265 270

Ala Ala Val Asp Thr Leu Val Ser Gly Phe Ser Gly Glu Ser Pro Leu
 275 280 285

Gly Gly Arg Thr Ser Arg Gln Pro Cys Gln Pro Pro Ala Arg Pro Arg
 290 295 300

Ala Ala Leu Leu Tyr Asp Glu Ala Met
 305 310

<210> 165
 <211> 395
 <212> PRT
 <213> Homo sapien

<400> 165

Glu Pro Arg Val Arg Arg Val Ser Asn Ala Glu Leu Ala Asp Arg Ala
 1 5 10 15

Arg Pro Arg Pro Pro Arg Ala Gln Gly Pro Pro Gly Pro Val Thr Thr
 20 25 30

Gly Pro Ser Thr Leu Glu Arg Pro Gln Leu Gly Leu Gly Thr Val Arg
 35 40 45

Ala Leu Thr Asp Ser Leu Val Asn Ala Ala Trp Pro Pro Pro Pro Pro
 50 55 60

Gln Asp Pro Arg Glu Ala Glu Thr Gly Ala Arg Thr Arg Ser Pro Arg
 65 70 75 80

Arg Arg Thr Trp Ser Glu Pro Ala Ala Pro Pro Arg Ala Leu Arg Leu
 85 90 95

Ala Leu Gly Pro Gly Pro Pro Leu Pro Asp Thr Val Ile Gly Leu Gly
 100 105 110

Lys Ala Val Arg Val Gly Asn Pro Ile Gly Pro Gly Val Arg Leu Val
 115 120 125

Leu Ser Arg Cys Ser His Trp Pro Ser Ala Ala Val Gly Gly Glu Ala
 130 135 140

228

Ala Ser Gly Glu Asp Asn Lys Gly Pro Arg Ala Ala Gly Ser Gly Val
 145 150 155 160

Pro Val Ser Arg Cys Phe Pro Glu Ala Glu Ala Pro Gly Leu Pro Pro
 165 170 175

Ala Ala Leu Gln Met Lys Cys Glu His Cys Thr Arg Lys Glu Cys Ser
 180 185 190

Lys Lys Thr Lys Thr Asp Asp Gln Glu Asn Val Ser Ala Asp Ala Pro
 195 200 205

Ser Pro Ala Gln Glu Asn Gly Glu Lys Gly Glu Phe His Lys Leu Ala
 210 215 220

Asp Ala Lys Ile Phe Leu Ser Asp Cys Leu Ala Cys Asp Ser Cys Met
 225 230 235 240

Thr Ala Glu Glu Gly Val Gln Leu Ser Gln Gln Asn Ala Lys Asp Phe
 245 250 255

Phe Arg Val Leu Asn Leu Asn Lys Lys Cys Asp Thr Ser Lys His Lys
 260 265 270

Val Leu Val Val Ser Val Cys Pro Gln Ser Leu Pro Tyr Phe Ala Ala
 275 280 285

Lys Phe Asn Leu Ser Val Thr Asp Ala Ser Arg Arg Leu Cys Gly Phe
 290 295 300

Leu Lys Ser Leu Gly Val His Tyr Val Phe Asp Thr Thr Ile Ala Ala
 305 310 315 320

Asp Phe Ser Ile Leu Glu Ser Gln Lys Glu Phe Val Arg Arg Tyr Arg
 325 330 335

Gln His Ser Glu Glu Glu Arg Thr Leu Pro Met Leu Thr Ser Ala Cys
 340 345 350

Pro Gly Trp Val Arg Tyr Ala Glu Arg Val Leu Gly Arg Pro Ile Thr
 355 360 365

Ala His Leu Cys Thr Ala Lys Ser Pro Gln Gln Val Met Gly Ser Leu
 370 375 380

Val Lys Asp Tyr Phe Ala Arg Gln Gln Val Ser

229

385

390

395

<210> 166
 <211> 285
 <212> PRT
 <213> Homo sapien

<400> 166

Met Gly Ser Ala Phe Pro Val Leu Pro Gly Gly Ser Thr Gly Trp Gly
 1 5 10 15

Ala Leu Gln Met Phe Gly Arg Thr Thr Pro Ser Pro Glu Gly Gly Ser
 20 25 30

Arg Gln Thr Trp Met Glu Cys Trp Cys Ser Asn Leu Ser Pro Glu Lys
 35 40 45

Ile Phe His Val Ile Val Ala Pro Cys Tyr Asp Lys Lys Leu Glu Ala
 50 55 60

Leu Gln Glu Ser Leu Pro Pro Ala Leu His Gly Ser Arg Gly Ala Asp
 65 70 75 80

Cys Val Leu Thr Ser Gly Glu Ile Ala Gln Ile Met Glu Gln Gly Asp
 85 90 95

Leu Ser Val Arg Asp Ala Ala Val Asp Thr Leu Phe Gly Asp Leu Lys
 100 105 110

Glu Asp Lys Val Thr Arg His Asp Gly Ala Ser Ser Asp Gly His Leu
 115 120 125

Ala His Ile Phe Arg His Ala Ala Lys Glu Leu Phe Asn Glu Asp Val
 130 135 140

Glu Glu Val Thr Tyr Arg Ala Leu Arg Asn Lys Asp Phe Gln Glu Val
 145 150 155 160

Thr Leu Glu Lys Asn Gly Glu Val Val Leu Arg Phe Ala Ala Ala Tyr
 165 170 175

Gly Phe Arg Asn Ile Gln Asn Met Ile Leu Lys Leu Lys Lys Gly Lys
 180 185 190

Phe Pro Phe His Phe Val Glu Val Leu Ala Cys Ala Gly Gly Cys Leu
 195 200 205

230

Asn Gly Arg Gly Gln Ala Gln Thr Pro Asp Gly His Ala Asp Lys Ala
 210 215 220

Leu Leu Arg Gln Met Glu Gly Ile Tyr Ala Asp Ile Pro Val Arg Arg
 225 230 235 240

Pro Glu Ser Ser Ala His Val Gln Glu Leu Tyr Gln Glu Trp Leu Glu
 245 250 255

Gly Ile Asn Ser Pro Lys Ala Arg Glu Val Leu His Thr Thr Tyr Gln
 260 265 270

Ser Gln Glu Arg Gly Thr His Ser Leu Asp Ile Lys Trp
 275 280 285

<210> 167
 <211> 170
 <212> PRT
 <213> Homo sapien

<400> 167

Asp Ser Val Ser His Pro Ala Lys Lys Phe Ala Met Ser Ala Ala Lys
 1 5 10 15

Cys Lys Gln Ser Arg Leu Trp Val Lys Ala Leu Val Met Lys Asn Lys
 20 25 30

Lys Lys Lys Ile Pro Lys His Phe Leu Thr Leu Val Leu Lys Lys Thr
 35 40 45

Pro Ser Pro Lys Val Cys Phe Ser Phe Asn Phe Leu Asp Phe Ala Arg
 50 55 60

Leu Ser Gly Cys Lys Leu Pro Thr Leu Phe Trp Met Asp Arg Asp Lys
 65 70 75 80

Val Phe Lys Gln Arg Leu Cys Pro Leu His Lys Pro Phe Pro Pro Pro
 85 90 95

Pro Pro Gln Pro Pro Ala Ala Ile Ile Thr Gly Ala Val Lys Trp Leu
 100 105 110

Leu Ser Asp Gly His Thr Thr Arg Arg Gln Met Lys Arg Ser Gly Ser
 115 120 125

Lys Arg Gly Ser Ala Ser Gln Tyr Gln Pro Ala Val Pro Arg Gly Gly

231

130 135 140
 Ser Ala Gly Arg Thr Val Phe Pro Arg Gln Ala Ala Met Pro Pro Pro
 145 150 155 160

 Thr Ala Lys Ala Pro Lys Ala Thr Ser Val
 165 170

 <210> 168
 <211> 159
 <212> PRT
 <213> Homo sapien

 <400> 168
 Met Ser Ala Ala Lys Cys Lys Gln Ser Arg Leu Trp Val Lys Ala Leu
 1 5 10 15

 Val Met Lys Asn Lys Lys Lys Lys Ile Pro Lys His Phe Leu Thr Leu
 20 25 30

 Val Leu Lys Lys Thr Pro Ser Pro Lys Val Cys Phe Ser Phe Asn Phe
 35 40 45

 Leu Asp Phe Ala Arg Leu Ser Gly Cys Lys Leu Pro Thr Leu Phe Trp
 50 55 60

 Met Asp Arg Asp Lys Val Phe Lys Gln Arg Leu Cys Pro Leu His Lys
 65 70 75 80

 Pro Phe Pro Pro Pro Pro Pro Gln Pro Pro Ala Ala Ile Ile Thr Gly
 85 90 95

 Ala Val Lys Trp Leu Leu Ser Asp Gly His Thr Thr Arg Arg Gln Met
 100 105 110

 Lys Arg Ser Gly Ser Lys Arg Gly Ser Ala Ser Gln Tyr Gln Pro Ala
 115 120 125

 Val Pro Arg Gly Gly Ser Ala Gly Arg Thr Val Phe Pro Arg Gln Ala
 130 135 140

 Ala Met Pro Pro Pro Thr Ala Lys Ala Pro Lys Gly Asn Ile Arg
 145 150 155

 <210> 169
 <211> 170
 <212> PRT

232

<213> Homo sapien

<400> 169

Asp Ser Val Ser His Pro Ala Lys Lys Phe Ala Met Ser Ala Ala Lys
 1 5 10 15

Cys Lys Gln Ser Arg Leu Trp Val Lys Ala Leu Val Met Lys Asn Lys
 20 25 30

Lys Lys Lys Ile Pro Lys His Phe Leu Thr Leu Val Leu Lys Lys Thr
 35 40 45

Pro Ser Pro Lys Val Cys Phe Ser Phe Asn Phe Leu Asp Phe Ala Arg
 50 55 60

Leu Ser Gly Cys Lys Leu Pro Thr Leu Phe Trp Met Asp Arg Asp Lys
 65 70 75 80

Val Phe Lys Gln Arg Leu Cys Pro Leu His Lys Pro Phe Pro Pro Pro
 85 90 95

Pro Pro Gln Pro Pro Ala Ala Ile Ile Thr Gly Ala Val Lys Trp Leu
 100 105 110

Leu Ser Asp Gly His Thr Thr Arg Arg Gln Met Lys Arg Ser Gly Ser
 115 120 125

Lys Arg Gly Ser Ala Ser Gln Tyr Gln Pro Ala Val Pro Arg Gly Gly
 130 135 140

Ser Ala Gly Arg Thr Val Phe Pro Arg Gln Ala Ala Met Pro Pro Pro
 145 150 155 160

Thr Ala Lys Ala Pro Lys Ala Thr Ser Val
 165 170

<210> 170

<211> 255

<212> PRT

<213> Homo sapien

<400> 170

Gln Leu Leu Arg Asp Pro Asn Val Ala Leu Glu Leu Ser Ala Met Cys
 1 5 10 15

Ser Thr Val Pro Trp Arg Arg Thr Leu Arg Glu Gly Gln Pro Cys His
 20 25 30

233

Leu Ser Leu Pro His His His Ser Pro Pro Pro Ile Lys Leu Gln Ser
 35 40 45

Gly Cys Trp Thr Pro Leu Gly Ala Val Ser Ala His His Pro Leu Cys
 50 55 60

Ala Ala Thr Trp Ser Gln Ala His Cys Pro Leu Ala Gly Arg Gly Pro
 65 70 75 80

Ser Arg Arg Arg Cys Gly Leu His Arg Ala Pro Ser Thr Lys Glu Ser
 85 90 95

Ala Asn Ala Ser Ala Gly Pro Arg Ala Met Ala Ser Leu Pro Gln Leu
 100 105 110

Met Ala Ala Pro Thr Ser Ser Cys Thr Ser Leu Met Trp Lys Gly Ser
 115 120 125

Met Ser Gln Trp Lys Ala Thr Arg Ser Pro Ile Lys Cys Ala Pro Ser
 130 135 140

His Pro Arg Met Arg Ser Cys Arg Pro Trp Arg Ser Ser Ser Leu Thr
 145 150 155 160

Trp His Gln Ala Pro Ser Met Arg Pro Gly Leu Asp Met Ser Ser Ala
 165 170 175

Pro Arg Arg Trp Trp Lys His Pro Leu Ser Cys Ala Cys Gly Arg Leu
 180 185 190

Cys Gly Glu Glu Ala Ala Asp Thr Gly Asp Asp Ile Leu Pro His Glu
 195 200 205

Thr Gly Leu Gln Pro Gly Met Val Pro Leu Lys Tyr Leu Leu Glu Glu
 210 215 220

Gly Val Trp Gly Ala Gly Val Gly Cys Gly Val Phe Pro Ala Ile Ser
 225 230 235 240

Thr Ala Tyr Asp His Cys Asn Asn Leu Ser Pro Ser Glu Glu His
 245 250 255

<210> 171
 <211> 147
 <212> PRT

234

<213> Homo sapien

<400> 171

Met Ser Ser Glu Pro Pro Pro Pro Pro Gln Pro Pro Thr His Gln Ala
 1 5 10 15

Ser Val Gly Leu Leu Asp Thr Pro Arg Ser Arg Glu Arg Ser Pro Ser
 20 25 30

Pro Leu Arg Gly Asn Val Val Pro Ser Pro Leu Pro Thr Arg Arg Thr
 35 40 45

Arg Thr Phe Ser Ala Thr Val Arg Ala Ser Gln Gly Pro Val Tyr Lys
 50 55 60

Gly Val Cys Lys Cys Phe Cys Arg Ser Lys Gly His Gly Phe Ile Thr
 65 70 75 80

Pro Ala Asp Gly Gly Pro Asp Ile Phe Leu His Ile Ser Asp Val Glu
 85 90 95

Gly Glu Tyr Val Pro Val Glu Gly Asp Glu Val Thr Tyr Lys Met Cys
 100 105 110

Ser Ile Pro Pro Lys Asn Glu Lys Leu Gln Ala Val Glu Val Val Ile
 115 120 125

Thr His Leu Ala Pro Gly Thr Lys His Glu Thr Trp Ser Gly His Val
 130 135 140

Ile Ser Ser
 145

<210> 172

<211> 255

<212> PRT

<213> Homo sapien

<400> 172

Gln Leu Leu Arg Asp Pro Asn Val Ala Leu Glu Leu Ser Ala Met Cys
 1 5 10 15

Ser Thr Val Pro Trp Arg Arg Thr Leu Arg Glu Gly Gln Pro Cys His
 20 25 30

Leu Ser Leu Pro His His His Ser Pro Pro Pro Ile Lys Leu Gln Ser
 35 40 45

235

Gly Cys Trp Thr Pro Leu Gly Ala Val Ser Ala His His Pro Leu Cys
 50 55 60

Ala Ala Thr Trp Ser Gln Ala His Cys Pro Leu Ala Gly Arg Gly Pro
 65 70 75 80

Ser Arg Arg Arg Cys Gly Leu His Arg Ala Pro Ser Thr Lys Glu Ser
 85 90 95

Ala Asn Ala Ser Ala Gly Pro Arg Ala Met Ala Ser Leu Pro Gln Leu
 100 105 110

Met Ala Ala Pro Thr Ser Ser Cys Thr Ser Leu Met Trp Lys Gly Ser
 115 120 125

Met Ser Gln Trp Lys Ala Thr Arg Ser Pro Ile Lys Cys Ala Pro Ser
 130 135 140

His Pro Arg Met Arg Ser Cys Arg Pro Trp Arg Ser Ser Ser Leu Thr
 145 150 155 160

Trp His Gln Ala Pro Ser Met Arg Pro Gly Leu Asp Met Ser Ser Ala
 165 170 175

Pro Arg Arg Trp Trp Lys His Pro Leu Ser Cys Ala Cys Gly Arg Leu
 180 185 190

Cys Gly Glu Glu Ala Ala Asp Thr Gly Asp Asp Ile Leu Pro His Glu
 195 200 205

Thr Gly Leu Gln Pro Gly Met Val Pro Leu Lys Tyr Leu Leu Glu Glu
 210 215 220

Gly Val Trp Gly Ala Gly Val Gly Cys Gly Val Phe Pro Ala Ile Ser
 225 230 235 240

Thr Ala Tyr Asp His Cys Asn Asn Leu Ser Pro Ser Glu Glu His
 245 250 255

<210> 173

<211> 243

<212> PRT

<213> Homo sapien

<400> 173

236

Leu Arg Thr Gly Arg Asn Ser Gly Gly Gly Gln Asn Gly Leu Gln Gly
 1 5 10 15
 Gln Pro Cys His Leu Ser Leu Pro His His His Ser Pro Pro Pro Ile
 20 25 30
 Lys Leu Gln Ser Gly Cys Trp Thr Pro Leu Gly Ala Val Ser Ala His
 35 40 45
 His Pro Leu Cys Ala Ala Thr Trp Ser Gln Ala His Cys Pro Leu Ala
 50 55 60
 Gly Arg Gly Pro Ser Arg Arg Arg Cys Gly Leu His Arg Ala Pro Ser
 65 70 75 80
 Thr Lys Glu Ser Ala Asn Ala Ser Ala Gly Pro Arg Ala Met Ala Ser
 85 90 95
 Leu Pro Gln Leu Met Ala Ala Pro Thr Ser Ser Cys Thr Ser Leu Met
 100 105 110
 Trp Lys Gly Ser Met Ser Gln Trp Lys Ala Thr Arg Ser Pro Ile Lys
 115 120 125
 Cys Ala Pro Ser His Pro Arg Met Arg Ser Cys Arg Pro Trp Arg Ser
 130 135 140
 Ser Ser Leu Thr Trp His Gln Ala Pro Ser Met Arg Pro Gly Leu Asp
 145 150 155 160
 Met Ser Ser Ala Pro Arg Arg Trp Trp Lys His Pro Leu Ser Cys Ala
 165 170 175
 Cys Gly Arg Leu Cys Gly Glu Glu Ala Ala Asp Thr Gly Asp Asp Ile
 180 185 190
 Leu Pro His Glu Thr Gly Leu Gln Pro Gly Met Val Pro Leu Lys Tyr
 195 200 205
 Leu Leu Glu Glu Gly Val Trp Gly Ala Gly Val Gly Cys Gly Val Phe
 210 215 220
 Pro Ala Ile Ser Thr Ala Tyr Asp His Cys Asn Asn Leu Ser Pro Ser
 225 230 235 240
 Glu Glu His

237

<210> 174
 <211> 147
 <212> PRT
 <213> Homo sapien

<400> 174

Met Ser Ser Glu Pro Pro Pro Pro Pro Gln Pro Pro Thr His Gln Ala
 1 5 10 15

Ser Val Gly Leu Leu Asp Thr Pro Arg Ser Arg Glu Arg Ser Pro Ser
 20 25 30

Pro Leu Arg Gly Asn Val Val Pro Ser Pro Leu Pro Thr Arg Arg Thr
 35 40 45

Arg Thr Phe Ser Ala Thr Val Arg Ala Ser Gln Gly Pro Val Tyr Lys
 50 55 60

Gly Val Cys Lys Cys Phe Cys Arg Ser Lys Gly His Gly Phe Ile Thr
 65 70 75 80

Pro Ala Asp Gly Gly Pro Asp Ile Phe Leu His Ile Ser Asp Val Glu
 85 90 95

Gly Glu Tyr Val Pro Val Glu Gly Asp Glu Val Thr Tyr Lys Met Cys
 100 105 110

Ser Ile Pro Pro Lys Asn Glu Lys Leu Gln Ala Val Glu Val Val Ile
 115 120 125

Thr His Leu Ala Pro Gly Thr Lys His Glu Thr Trp Ser Gly His Val
 130 135 140

Ile Ser Ser
 145

<210> 175
 <211> 202
 <212> PRT
 <213> Homo sapien

<400> 175

Trp Gly Thr Ala Val Gly Arg Gly Trp Asn Glu Leu Cys Val Pro Arg
 1 5 10 15

238

Ser Ala Asp Gly Ala Pro Asp Ile Ser Pro Ser Leu Ser Gly Arg Cys
 20 25 30

Gly Leu His Arg Ala Pro Ser Thr Lys Glu Ser Ala Asn Ala Ser Ala
 35 40 45

Gly Pro Arg Ala Met Ala Ser Leu Pro Gln Leu Met Ala Ala Pro Thr
 50 55 60

Ser Ser Cys Thr Ser Leu Met Trp Lys Gly Ser Met Ser Gln Trp Lys
 65 70 75 80

Ala Thr Arg Ser Pro Ile Lys Cys Ala Pro Ser His Pro Arg Met Arg
 85 90 95

Ser Cys Arg Pro Trp Arg Ser Ser Ser Leu Thr Trp His Gln Ala Pro
 100 105 110

Ser Met Arg Pro Gly Leu Asp Met Ser Ser Ala Pro Arg Arg Trp Trp
 115 120 125

Lys His Pro Leu Ser Cys Ala Cys Gly Arg Leu Cys Gly Glu Glu Ala
 130 135 140

Ala Asp Thr Gly Asp Asp Ile Leu Pro His Glu Thr Gly Leu Gln Pro
 145 150 155 160

Gly Met Val Pro Leu Lys Tyr Leu Leu Glu Glu Gly Val Trp Gly Ala
 165 170 175

Gly Val Gly Cys Gly Val Phe Pro Ala Ile Ser Thr Ala Tyr Asp His
 180 185 190

Cys Asn Asn Leu Ser Pro Ser Glu Glu His
 195 200

<210> 176

<211> 138

<212> PRT

<213> Homo sapien

<400> 176

Met Ala Ser Leu Pro Gln Leu Met Ala Ala Pro Thr Ser Ser Cys Thr
 1 5 10 15

Ser Leu Met Trp Lys Gly Ser Met Ser Gln Trp Lys Ala Thr Arg Ser
 20 25 30

239

Pro Ile Lys Cys Ala Pro Ser His Pro Arg Met Arg Ser Cys Arg Pro
 35 40 45

Trp Arg Ser Ser Ser Leu Thr Trp His Gln Ala Pro Ser Met Arg Pro
 50 55 60

Gly Leu Asp Met Ser Ser Ala Pro Arg Arg Trp Trp Lys His Pro Leu
 65 70 75 80

Ser Cys Ala Cys Gly Arg Leu Cys Gly Glu Glu Ala Ala Asp Thr Gly
 85 90 95

Asp Asp Ile Leu Pro His Glu Thr Gly Leu Gln Pro Gly Met Val Pro
 100 105 110

Leu Lys Tyr Leu Leu Glu Glu Gly Val Trp Gly Gly Arg Cys Gly Val
 115 120 125

Trp Gly Val Pro Gly His Gln His Ser Leu
 130 135

<210> 177
 <211> 185
 <212> PRT
 <213> Homo sapien

<400> 177

Met Ser Ser Glu Pro Pro Pro Pro Pro Gln Pro Pro Thr His Gln Ala
 1 5 10 15

Ser Val Gly Leu Leu Asp Thr Pro Arg Ser Arg Glu Arg Ser Pro Ser
 20 25 30

Pro Ser Thr Lys Glu Ser Ala Asn Ala Ser Ala Gly Pro Arg Ala Met
 35 40 45

Ala Ser Leu Pro Gln Leu Met Ala Ala Pro Thr Ser Ser Cys Thr Ser
 50 55 60

Leu Met Trp Lys Gly Ser Met Ser Gln Trp Lys Ala Thr Arg Ser Pro
 65 70 75 80

Ile Lys Cys Ala Pro Ser His Pro Arg Met Arg Ser Cys Arg Pro Trp
 85 90 95

240

Arg Ser Ser Ser Leu Thr Trp His Gln Ala Pro Ser Met Arg Pro Gly
 100 105 110

Leu Asp Met Ser Ser Ala Pro Arg Arg Trp Trp Lys His Pro Leu Ser
 115 120 125

Cys Ala Cys Gly Arg Leu Cys Gly Glu Glu Ala Ala Asp Thr Gly Asp
 130 135 140

Asp Ile Leu Pro His Glu Thr Gly Leu Gln Pro Gly Met Val Pro Leu
 145 150 155 160

Lys Tyr Leu Leu Glu Glu Gly Val Trp Gly Gly Arg Cys Gly Val Trp
 165 170 175

Gly Val Pro Gly His Gln His Ser Leu
 180 185

<210> 178

<211> 265

<212> PRT

<213> Homo sapien

<400> 178

Ser Phe Pro Pro Ala His Leu Phe Ser Ala Cys Arg Gly Ser Ser Ser
 1 5 10 15

Arg Pro Pro Arg Cys Phe Cys Leu Trp Ala Gly Ala Leu Asp Gly Gly
 20 25 30

Leu Ala Gly Arg Trp Gly Glu Ala Arg Gly Ala Ser His Ala Gly Ser
 35 40 45

Arg Ala Thr Pro Arg Arg Ala Trp Pro Arg Gln Leu Trp Leu Glu Val
 50 55 60

Gly Thr Ser Ala Met Ser Ser Glu Pro Pro Pro Pro Pro Gln Pro Pro
 65 70 75 80

Thr His Gln Ala Ser Val Gly Leu Leu Asp Thr Pro Arg Ser Arg Glu
 85 90 95

Arg Ser Pro Ser Pro Ser Thr Lys Glu Ser Ala Asn Ala Ser Ala Gly
 100 105 110

Pro Arg Ala Met Ala Ser Leu Pro Gln Leu Met Ala Ala Pro Thr Ser
 115 120 125

241

Ser Cys Thr Ser Leu Met Trp Lys Gly Ser Met Ser Gln Trp Lys Ala
 130 135 140

Thr Arg Ser Pro Ile Lys Cys Ala Pro Ser His Pro Arg Met Arg Ser
 145 150 155 160

Cys Arg Pro Trp Arg Ser Ser Ser Leu Thr Trp His Gln Ala Pro Ser
 165 170 175

Met Arg Pro Gly Leu Asp Met Ser Ser Ala Pro Arg Arg Trp Trp Lys
 180 185 190

His Pro Leu Ser Cys Ala Cys Gly Arg Leu Cys Gly Glu Glu Ala Ala
 195 200 205

Asp Thr Gly Asp Asp Ile Leu Pro His Glu Thr Gly Leu Gln Pro Gly
 210 215 220

Met Val Pro Leu Lys Tyr Leu Leu Glu Glu Gly Val Trp Gly Ala Gly
 225 230 235 240

Val Gly Cys Gly Val Phe Pro Ala Ile Ser Thr Ala Tyr Asp His Cys
 245 250 255

Asn Asn Leu Ser Pro Ser Glu Glu His
 260 265

<210> 179
 <211> 201
 <212> PRT
 <213> Homo sapien

<400> 179

Met Cys Ser Thr Val Pro Trp Arg Arg Thr Leu Arg Glu Gly Gln Phe
 1 5 10 15

Leu Pro Leu Leu Pro Cys Gly Val Trp Leu Pro Ala Ala Ser Gly Arg
 20 25 30

Val Arg Gly Val Ala Glu Phe Gly Ser Arg Trp Leu Ala Leu Lys Ser
 35 40 45

Pro Trp Leu Trp Val Phe Phe Phe Glu Thr Glu Ser Cys Ser Val Ala
 50 55 60

242

Gln Ala Gly Val Gln Trp Cys Asp Leu Ser Ser Leu Glu Pro Pro Pro
 65 70 75 80

Pro Arg Phe Lys Gln Phe Ser Cys Leu Ser Leu Gln Val Asp Gly Ile
 85 90 95

Thr Gly Ala Cys His His Ala Gln Leu Ile Phe Val Phe Val Leu Glu
 100 105 110

Thr Gly Phe Pro His Val Gly Gln Ala Ser Leu Glu Leu Leu Thr Leu
 115 120 125

Ser Asp Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Ala Gly Val
 130 135 140

Ser His Cys Ala Arg Pro Leu Ala Leu Gly Phe Leu Leu Thr Phe Leu
 145 150 155 160

Leu Pro Ser His Lys Tyr Tyr Val Ser Gln Met Cys Arg Asp Pro Cys
 165 170 175

Leu Val Leu Gly Thr Gln Arg Gly Pro Met Pro Ser Trp Ser Trp Gly
 180 185 190

Arg Met Trp His Phe His Glu Glu Leu
 195 200

<210> 180
 <211> 159
 <212> PRT
 <213> Homo sapien

<400> 180

Met Ala Gln Gly Leu Ala Val Arg Glu Met Thr Gly Met Thr Lys Phe
 1 5 10 15

Lys Pro Tyr Phe Ile Ser Ala Thr Ser Glu Ile Leu Ser Gln Lys Cys
 20 25 30

Ile Asn Thr Asn Val Leu Phe Leu Ser Leu Ser Asp Asn His Gly His
 35 40 45

Ile Asp Pro Ser Leu Arg Leu Ile Trp Asp Leu Ala Phe Leu Gly Ser
 50 55 60

Ser Tyr Val Met Trp Glu Met Thr Thr Gln Val Ser His Tyr Tyr Leu
 65 70 75 80

243

Ala Gln Leu Thr Ser Val Arg Gln Trp Lys Thr Asn Asp Asp Thr Ile
85 90 95

Asp Phe Asp Tyr Thr Val Leu Leu His Glu Leu Ser Thr Gln Glu Ile
100 105 110

Ile Pro Cys Arg Ile His Leu Val Trp Tyr Pro Gly Lys Pro Leu Lys
115 120 125

Val Lys Tyr His Cys Gln Glu Leu Gln Thr Pro Glu Glu Ala Ser Gly
130 135 140

Thr Glu Glu Gly Ser Ala Val Val Pro Thr Glu Leu Ser Asn Phe
145 150 155

<210> 181
<211> 128
<212> PRT
<213> Homo sapien

<400> 181

Met Arg Ile His Asp Phe His Ile Leu Lys Gln Asn Thr Thr Lys Asn
1 5 10 15

Arg Glu Ala Glu Ile Glu Lys Ala Val Gly Asp Thr Arg His Pro Phe
20 25 30

Lys Thr Arg Met Tyr Cys Ile Val Ile Thr Leu Asn Thr Thr Ile Phe
35 40 45

Ile Thr Leu Thr Leu Phe Ser Pro Ser Arg Lys Thr Asn Asp Asp Thr
50 55 60

Ile Asp Phe Asp Tyr Thr Val Leu Leu His Glu Leu Ser Thr Gln Glu
65 70 75 80

Ile Ile Pro Cys Arg Ile His Leu Val Trp Tyr Pro Gly Lys Pro Leu
85 90 95

Lys Val Lys Tyr His Cys Gln Glu Leu Gln Thr Pro Glu Glu Ala Ser
100 105 110

Gly Thr Glu Glu Gly Ser Ala Val Val Pro Thr Glu Leu Ser Asn Phe
115 120 125

244

<210> 182
 <211> 224
 <212> PRT
 <213> Homo sapien

<400> 182

Met Asp Gly Asp Gln Thr Glu Glu Arg Met Met Lys Met Met Val His
 1 5 10 15

Gln Arg Pro Leu Pro Gln Pro Ala Leu Leu Pro Met Ser Ser Asn Thr
 20 25 30

Phe Pro Ser Arg Ser Thr Lys Pro Ser Pro Met Asn Pro Leu Pro Ser
 35 40 45

Ser His Met Pro Gly Ala Phe Ser Glu Ser Asn Ser Ser Phe Pro Gln
 50 55 60

Ser Ala Ser Leu Pro Pro Tyr Phe Ser Gln Gly Pro Ser Asn Arg Pro
 65 70 75 80

Pro Ile Arg Ala Glu Gly Arg Asn Phe Pro Leu Pro Leu Pro Asn Lys
 85 90 95

Pro Arg Pro Pro Ser Pro Ala Glu Glu Glu Asn Ser Leu Asn Glu Glu
 100 105 110

Trp Tyr Val Ser Tyr Ile Thr Arg Pro Glu Ala Glu Ala Ala Leu Arg
 115 120 125

Lys Ile Asn Gln Asp Gly Thr Phe Leu Val Arg Asp Ser Ser Lys Lys
 130 135 140

Thr Thr Thr Asn Pro Tyr Val Leu Met Val Leu Tyr Lys Asp Lys Val
 145 150 155 160

Tyr Asn Ile Gln Ile Arg Tyr Gln Lys Glu Ser Gln Val Tyr Leu Leu
 165 170 175

Gly Thr Gly Leu Arg Gly Lys Glu Asp Phe Leu Ser Val Ser Asp Ile
 180 185 190

Ile Asp Tyr Phe Arg Lys Met Pro Leu Leu Leu Ile Asp Gly Lys Asn
 195 200 205

Arg Gly Ser Arg Tyr Gln Cys Thr Leu Thr His Ala Ala Gly Tyr Pro
 210 215 220

245

<210> 183
 <211> 230
 <212> PRT
 <213> Homo sapien

<400> 183

Met Phe Leu Ser Asp Ser Trp Gly Leu Pro Ile Ser Phe Ile Val Phe
 1 5 10 15

Tyr Phe Cys Thr Val His Gln Arg Pro Leu Pro Gln Pro Ala Leu Leu
 20 25 30

Pro Met Ser Ser Asn Thr Phe Pro Ser Arg Ser Thr Lys Pro Ser Pro
 35 40 45

Met Asn Pro Leu Pro Ser Ser His Met Pro Gly Ala Phe Ser Glu Ser
 50 55 60

Asn Ser Ser Phe Pro Gln Ser Ala Ser Leu Pro Pro Tyr Phe Ser Gln
 65 70 75 80

Gly Pro Ser Asn Arg Pro Pro Ile Arg Ala Glu Gly Arg Asn Phe Pro
 85 90 95

Leu Pro Leu Pro Asn Lys Pro Arg Pro Pro Ser Pro Ala Glu Glu Glu
 100 105 110

Asn Ser Leu Asn Glu Glu Trp Tyr Val Ser Tyr Ile Thr Arg Pro Glu
 115 120 125

Ala Glu Ala Ala Leu Arg Lys Ile Asn Gln Asp Gly Thr Phe Leu Val
 130 135 140

Arg Asp Ser Ser Lys Lys Thr Thr Thr Asn Pro Tyr Val Leu Met Val
 145 150 155 160

Leu Tyr Lys Asp Lys Val Tyr Asn Ile Gln Ile Arg Tyr Gln Lys Glu
 165 170 175

Ser Gln Val Tyr Leu Leu Gly Thr Gly Leu Arg Gly Lys Glu Asp Phe
 180 185 190

Leu Ser Val Ser Asp Ile Ile Asp Tyr Phe Arg Lys Met Pro Leu Leu
 195 200 205

246

Leu Ile Asp Gly Lys Asn Arg Gly Ser Arg Tyr Gln Cys Thr Leu Thr
 210 215 220

His Ala Ala Gly Tyr Pro
 225 230

<210> 184
 <211> 225
 <212> PRT
 <213> Homo sapien

<400> 184

Gln Leu Gly Pro Ala Asn Leu Ile His Cys Phe Leu Leu Leu His Val
 1 5 10 15

His Gln Arg Pro Leu Pro Gln Pro Ala Leu Leu Pro Met Ser Ser Asn
 20 25 30

Thr Phe Pro Ser Arg Ser Thr Lys Pro Ser Pro Met Asn Pro Leu Pro
 35 40 45

Ser Ser His Met Pro Gly Ala Phe Ser Glu Ser Asn Ser Ser Phe Pro
 50 55 60

Gln Ser Ala Ser Leu Pro Pro Tyr Phe Ser Gln Gly Pro Ser Asn Arg
 65 70 75 80

Pro Pro Ile Arg Ala Glu Gly Arg Asn Phe Pro Leu Pro Leu Pro Asn
 85 90 95

Lys Pro Arg Pro Pro Ser Pro Ala Glu Glu Glu Asn Ser Leu Asn Glu
 100 105 110

Glu Trp Tyr Val Ser Tyr Ile Thr Arg Pro Glu Ala Glu Ala Ala Leu
 115 120 125

Arg Lys Ile Asn Gln Asp Gly Thr Phe Leu Val Arg Asp Ser Ser Lys
 130 135 140

Lys Thr Thr Thr Asn Pro Tyr Val Leu Met Val Leu Tyr Lys Asp Lys
 145 150 155 160

Val Tyr Asn Ile Gln Ile Arg Tyr Gln Lys Glu Ser Gln Val Tyr Leu
 165 170 175

Leu Gly Thr Gly Leu Arg Gly Lys Glu Asp Phe Leu Ser Val Ser Asp
 180 185 190

247

Ile Ile Asp Tyr Phe Arg Lys Met Pro Leu Leu Leu Ile Asp Gly Lys
 195 200 205

Asn Arg Gly Ser Arg Tyr Gln Cys Thr Leu Thr His Ala Ala Gly Tyr
 210 215 220

Pro
 225

<210> 185
 <211> 1085
 <212> PRT
 <213> Homo sapien

<400> 185

Met Ala Ala Ser Thr Gly Tyr Val Arg Leu Trp Gly Ala Ala Arg Cys
 1 5 10 15

Trp Val Leu Arg Arg Pro Met Leu Ala Ala Ala Gly Gly Arg Val Pro
 20 25 30

Thr Ala Ala Gly Ala Trp Leu Leu Arg Gly Gln Arg Thr Cys Asp Ala
 35 40 45

Ser Pro Pro Trp Ala Leu Trp Gly Arg Gly Pro Ala Ile Gly Gly Gln
 50 55 60

Trp Arg Gly Phe Trp Glu Ala Ser Ser Arg Gly Gly Gly Ala Phe Ser
 65 70 75 80

Gly Gly Glu Asp Ala Ser Glu Gly Gly Ala Glu Glu Gly Ala Gly Gly
 85 90 95

Ala Gly Gly Ser Ala Gly Ala Gly Glu Gly Pro Val Ile Thr Ala Leu
 100 105 110

Thr Pro Met Thr Ile Pro Asp Val Phe Pro His Leu Pro Leu Ile Ala
 115 120 125

Ile Thr Arg Asn Pro Val Phe Pro Arg Phe Ile Lys Ile Ile Glu Val
 130 135 140

Lys Asn Lys Lys Leu Val Glu Leu Leu Arg Arg Lys Val Arg Leu Ala
 145 150 155 160

248

Gln Pro Tyr Val Gly Val Phe Leu Lys Arg Asp Asp Ser Asn Glu Ser
 165 170 175

Asp Val Val Glu Ser Leu Asp Glu Ile Tyr His Thr Gly Thr Phe Ala
 180 185 190

Gln Ile His Glu Met Gln Asp Leu Gly Asp Lys Leu Arg Met Ile Val
 195 200 205

Met Gly His Arg Arg Val His Ile Ser Arg Gln Leu Glu Val Glu Pro
 210 215 220

Glu Glu Pro Glu Ala Glu Asn Lys His Lys Pro Arg Arg Lys Ser Lys
 225 230 235 240

Arg Gly Lys Lys Glu Ala Glu Asp Glu Leu Ser Ala Arg His Pro Ala
 245 250 255

Glu Leu Ala Met Glu Pro Thr Pro Glu Leu Pro Ala Glu Val Leu Met
 260 265 270

Val Glu Val Glu Asn Val Val His Glu Asp Phe Gln Val Thr Glu Glu
 275 280 285

Val Lys Ala Leu Thr Ala Glu Ile Val Lys Thr Ile Arg Asp Ile Ile
 290 295 300

Ala Leu Asn Pro Leu Tyr Arg Glu Ser Val Leu Gln Met Met Gln Ala
 305 310 315 320

Gly Gln Arg Val Val Asp Asn Pro Ile Tyr Leu Ser Asp Met Gly Ala
 325 330 335

Ala Leu Thr Gly Ala Glu Ser His Glu Leu Gln Asp Val Leu Glu Glu
 340 345 350

Thr Asn Ile Pro Lys Arg Leu Tyr Lys Ala Leu Ser Leu Leu Lys Lys
 355 360 365

Glu Phe Glu Leu Ser Lys Leu Gln Gln Arg Leu Gly Arg Glu Val Glu
 370 375 380

Glu Lys Ile Lys Gln Thr His Arg Lys Tyr Leu Leu Gln Glu Gln Leu
 385 390 395 400

Lys Ile Ile Lys Lys Glu Leu Gly Leu Glu Lys Asp Asp Lys Asp Ala

249

405

410

415

Ile Glu Glu Lys Phe Arg Glu Arg Leu Lys Glu Leu Val Val Pro Lys
 420 425 430

His Val Met Asp Val Val Asp Glu Glu Leu Ser Lys Leu Gly Leu Leu
 435 440 445

Asp Asn His Ser Ser Glu Phe Asn Val Thr Arg Asn Tyr Leu Asp Trp
 450 455 460

Leu Thr Ser Ile Pro Trp Gly Lys Tyr Ser Asn Glu Asn Leu Asp Leu
 465 470 475 480

Ala Arg Ala Gln Ala Val Leu Glu Glu Asp His Tyr Gly Met Glu Asp
 485 490 495

Val Lys Lys Arg Ile Leu Glu Phe Ile Ala Val Ser Gln Leu Arg Gly
 500 505 510

Ser Thr Gln Gly Lys Ile Leu Cys Phe Tyr Gly Pro Pro Gly Val Gly
 515 520 525

Lys Thr Ser Ile Ala Arg Ser Ile Ala Arg Ala Leu Asn Arg Glu Tyr
 530 535 540

Phe Arg Phe Ser Val Gly Gly Met Thr Asp Val Ala Glu Ile Lys Gly
 545 550 555 560

His Arg Arg Thr Tyr Val Gly Ala Met Pro Gly Lys Ile Ile Gln Cys
 565 570 575

Leu Lys Lys Thr Lys Thr Glu Asn Pro Leu Ile Leu Ile Asp Glu Val
 580 585 590

Arg Ala Glu Arg Pro Gly Asp Pro Leu Thr Arg Gln Cys Arg Val Gln
 595 600 605

Asp Glu Ala Glu Ala Phe Arg Val Leu Gly Ser Pro Ser Gln Leu Arg
 610 615 620

Gly His Arg Arg Asp Ala Gly Pro Asp Gly Thr Asp Gly Ser Leu Pro
 625 630 635 640

Thr His Ser His Ala Gln Gln Ala Ala Arg Pro Arg Gln Gly Val Gly
 645 650 655

250

Ala Ala Leu Thr Arg Gly Leu Pro Ser Pro Asp Pro Gly Val Ser Pro
 660 665 670

Leu Gly Gly Leu Ala Arg Gly Thr Ala Arg Gly Thr Thr Cys Cys Leu
 675 680 685

Leu Pro Gln Val Asp Lys Ile Gly Arg Gly Tyr Gln Gly Asp Pro Ser
 690 695 700

Ser Ala Leu Leu Glu Leu Leu Asp Pro Glu Gln Asn Ala Asn Phe Leu
 705 710 715 720

Asp His Tyr Leu Asp Val Pro Val Asp Leu Ser Lys Val Gly Gly Leu
 725 730 735

Ser Gly Ala Trp Ala Cys Trp Gly Gly Tyr Ala Ala Ser Pro Pro Ala
 740 745 750

Pro Cys Arg Arg Pro Gln Val Leu Phe Ile Cys Thr Ala Asn Val Thr
 755 760 765

Asp Thr Ile Pro Glu Pro Leu Arg Asp Arg Met Glu Met Ile Asn Val
 770 775 780

Ser Gly Tyr Val Ala Gln Glu Lys Leu Ala Ile Ala Glu Arg Tyr Leu
 785 790 795 800

Val Pro Gln Ala Arg Ala Leu Cys Gly Leu Asp Glu Ser Lys Ala Lys
 805 810 815

Leu Ser Ser Asp Val Leu Thr Leu Leu Ile Lys Gln Tyr Cys Arg Glu
 820 825 830

Ser Gly Val Arg Asn Leu Gln Lys Gln Val Glu Lys Val Leu Arg Lys
 835 840 845

Ser Ala Tyr Lys Ile Val Ser Gly Glu Ala Glu Ser Val Glu Val Thr
 850 855 860

Pro Glu Asn Leu Gln Asp Phe Val Gly Lys Pro Val Phe Thr Val Glu
 865 870 875 880

Arg Met Tyr Asp Val Thr Pro Pro Gly Val Val Met Gly Leu Ala Trp
 885 890 895

251

Thr Ala Met Gly Gly Ser Thr Leu Phe Val Glu Thr Ser Leu Arg Arg
 900 905 910

Pro Gln Asp Lys Asp Ala Lys Gly Asp Lys Asp Gly Ser Leu Glu Val
 915 920 925

Thr Gly Gln Leu Gly Glu Val Met Lys Glu Ser Ala Arg Ile Ala Tyr
 930 935 940

Thr Phe Ala Arg Ala Phe Leu Met Gln His Ala Pro Ala Asn Asp Tyr
 945 950 955 960

Leu Val Thr Ser His Ile His Leu His Val Pro Glu Gly Ala Thr Pro
 965 970 975

Lys Asp Gly Pro Ser Ala Gly Cys Thr Ile Val Thr Ala Leu Leu Ser
 980 985 990

Leu Ala Met Gly Arg Pro Val Arg Gln Asn Leu Ala Met Thr Gly Glu
 995 1000 1005

Val Ser Leu Thr Gly Lys Ile Leu Pro Val Gly Gly Ile Lys Glu
 1010 1015 1020

Lys Thr Ile Ala Ala Lys Arg Ala Gly Val Thr Cys Ile Val Leu
 1025 1030 1035

Pro Ala Glu Asn Lys Lys Asp Phe Tyr Asp Leu Ala Ala Phe Ile
 1040 1045 1050

Thr Glu Gly Leu Glu Val His Phe Val Glu His Tyr Arg Glu Ile
 1055 1060 1065

Phe Asp Ile Ala Phe Pro Asp Glu Gln Ala Glu Ala Leu Ala Val
 1070 1075 1080

Glu Arg
 1085

<210> 186

<211> 668

<212> PRT

<213> Homo sapien

<400> 186

Asn Ser Ala Pro Ser Ser Pro Arg Arg Pro Ser Ser Leu Lys Arg Leu

252

1	5	10	15
Phe Arg Ala Thr Arg Pro Ser Gly Thr Glu Ala Arg Ala Gly Arg His	20	25	30
Val Arg Phe Ala Ala Ser Gly Asn Asp Ala Ser Cys Val Ser Arg Gln	35	40	45
Tyr Gly Arg Ala Met Ala Ala Ser Thr Gly Tyr Val Arg Leu Trp Gly	50	55	60
Ala Ala Arg Cys Trp Val Leu Arg Arg Pro Met Leu Ala Ala Ala Gly	65	70	75
Gly Arg Val Pro Thr Ala Ala Gly Ala Trp Leu Leu Arg Gly Gln Arg	85	90	95
Thr Cys Asp Ala Ser Pro Pro Trp Ala Leu Trp Gly Arg Gly Pro Ala	100	105	110
Ile Gly Gly Gln Trp Arg Gly Phe Trp Glu Ala Ser Ser Arg Gly Gly	115	120	125
Gly Ala Phe Ser Gly Gly Glu Asp Ala Ser Glu Gly Gly Ala Glu Glu	130	135	140
Gly Ala Gly Gly Ala Gly Gly Ser Ala Gly Ala Gly Glu Gly Pro Val	145	150	155
Ile Thr Ala Leu Thr Pro Met Thr Ile Pro Asp Val Phe Pro His Leu	165	170	175
Pro Leu Ile Ala Ile Thr Arg Asn Pro Val Phe Pro Arg Phe Ile Lys	180	185	190
Ile Ile Glu Val Lys Asn Lys Lys Leu Val Glu Leu Leu Arg Arg Lys	195	200	205
Val Arg Leu Ala Gln Pro Tyr Val Gly Val Phe Leu Lys Arg Asp Asp	210	215	220
Ser Asn Glu Ser Asp Val Val Glu Ser Leu Asp Glu Ile Tyr His Thr	225	230	235
Gly Thr Phe Ala Gln Ile His Glu Met Gln Asp Leu Gly Asp Lys Leu	245	250	255

253

Arg Met Ile Val Met Gly His Arg Arg Val His Ile Ser Arg Gln Leu
 260 265 270

Glu Val Glu Pro Glu Glu Pro Glu Ala Glu Asn Lys His Lys Pro Arg
 275 280 285

Arg Lys Ser Lys Arg Gly Lys Lys Glu Ala Glu Asp Glu Leu Ser Ala
 290 295 300

Arg His Pro Ala Glu Leu Ala Met Glu Pro Thr Pro Glu Leu Pro Ala
 305 310 315 320

Glu Val Leu Met Val Glu Val Glu Asn Val Val His Glu Asp Phe Gln
 325 330 335

Val Thr Glu Glu Val Lys Ala Leu Thr Ala Glu Ile Val Lys Thr Ile
 340 345 350

Arg Asp Ile Ile Ala Leu Asn Pro Leu Tyr Arg Glu Ser Val Leu Gln
 355 360 365

Met Met Gln Ala Gly Gln Arg Val Val Asp Asn Pro Ile Tyr Leu Ser
 370 375 380

Asp Met Gly Ala Ala Leu Thr Gly Ala Glu Ser His Glu Leu Gln Asp
 385 390 395 400

Val Leu Glu Glu Thr Asn Ile Pro Lys Arg Leu Tyr Lys Ala Leu Ser
 405 410 415

Leu Leu Lys Lys Glu Phe Glu Leu Ser Lys Leu Gln Gln Arg Leu Gly
 420 425 430

Arg Glu Val Glu Glu Lys Ile Lys Gln Thr His Arg Lys Tyr Leu Leu
 435 440 445

Gln Glu Gln Leu Lys Ile Ile Lys Lys Glu Leu Gly Leu Glu Lys Asp
 450 455 460

Asp Lys Asp Ala Ile Glu Glu Lys Phe Arg Glu Arg Leu Lys Glu Leu
 465 470 475 480

Val Val Pro Lys His Val Met Asp Val Val Asp Glu Glu Leu Ser Lys
 485 490 495

254

Leu Gly Leu Leu Asp Asn His Ser Ser Glu Phe Asn Val Thr Arg Asn
 500 505 510

Tyr Leu Asp Trp Leu Thr Ser Ile Pro Trp Gly Lys Tyr Ser Asn Glu
 515 520 525

Asn Leu Asp Leu Ala Arg Ala Gln Ala Val Leu Glu Glu Asp His Tyr
 530 535 540

Gly Met Glu Asp Val Lys Lys Arg Ile Leu Glu Phe Ile Ala Val Ser
 545 550 555 560

Gln Leu Arg Gly Ser Thr Gln Gly Lys Ile Leu Cys Phe Tyr Gly Pro
 565 570 575

Pro Gly Val Gly Lys Thr Ser Ile Ala Arg Ser Ile Ala Arg Ala Leu
 580 585 590

Asn Arg Glu Tyr Phe Arg Phe Ser Val Gly Gly Met Thr Asp Val Ala
 595 600 605

Glu Ile Lys Gly His Arg Arg Thr Tyr Val Gly Ala Met Pro Gly Lys
 610 615 620

Ile Ile Gln Cys Leu Lys Lys Thr Lys Thr Glu Asn Pro Leu Ile Leu
 625 630 635 640

Ile Asp Glu Val Arg Ala Glu Arg Pro Gly Asp Pro Leu Thr Arg Gln
 645 650 655

Cys Arg Val Gln Asp Glu Ala Glu Pro Ser Gly Ser
 660 665

<210> 187

<211> 771

<212> PRT

<213> Homo sapien

<400> 187

Met Glu Glu Arg Lys His Ser Leu Phe Phe Ser Pro Glu Ile Ala Tyr
 1 5 10 15

Pro Lys Asp Lys Ala Leu Arg Gly Lys Glu Thr Gly Phe Gly Phe Ser
 20 25 30

Phe Asp Ser Leu Gly Pro Val Ser Leu Gly Leu Val Ser Pro Pro Gly

255

35

40

45

Thr Ala Leu Leu His Leu Pro Gly Arg Pro Trp Pro Gly Pro Val Gly
 50 55 60

Gly Gly Glu Gly Val Asp Gly Ala Gly Gly Trp Gly Ser Gln Gly His
 65 70 75 80

Ala Pro Thr Gln Pro Thr Pro Cys Trp Ser Thr Ala Gly Pro Gln Arg
 85 90 95

Pro Cys Pro Ile Leu Gly Ala Leu Thr Ala Glu Ile Val Lys Thr Ile
 100 105 110

Arg Asp Ile Ile Ala Leu Asn Pro Leu Tyr Arg Glu Ser Val Leu Gln
 115 120 125

Met Met Gln Ala Gly Gln Arg Val Val Asp Asn Pro Ile Tyr Leu Ser
 130 135 140

Asp Met Gly Ala Ala Leu Thr Gly Ala Glu Ser His Glu Leu Gln Asp
 145 150 155 160

Val Leu Glu Glu Thr Asn Ile Pro Lys Arg Leu Tyr Lys Ala Leu Ser
 165 170 175

Leu Leu Lys Lys Glu Phe Glu Leu Ser Lys Leu Gln Gln Arg Leu Gly
 180 185 190

Arg Glu Val Glu Glu Lys Ile Lys Gln Thr His Arg Lys Tyr Leu Leu
 195 200 205

Gln Glu Gln Leu Lys Ile Ile Lys Lys Glu Leu Gly Leu Glu Lys Asp
 210 215 220

Asp Lys Asp Ala Ile Glu Glu Lys Phe Arg Glu Arg Leu Lys Glu Leu
 225 230 235 240

Val Val Pro Lys His Val Met Asp Val Val Asp Glu Glu Leu Ser Lys
 245 250 255

Leu Gly Leu Leu Asp Asn His Ser Ser Glu Phe Asn Val Thr Arg Asn
 260 265 270

Tyr Leu Asp Trp Leu Thr Ser Ile Pro Trp Gly Lys Tyr Ser Asn Glu
 275 280 285

256

Asn Leu Asp Leu Ala Arg Ala Gln Ala Val Leu Glu Glu Asp His Tyr
 290 295 300

Gly Met Glu Asp Val Lys Lys Arg Ile Leu Glu Phe Ile Ala Val Ser
 305 310 315 320

Gln Leu Arg Gly Ser Thr Gln Gly Lys Ile Leu Cys Phe Tyr Gly Pro
 325 330 335

Pro Gly Val Gly Lys Thr Ser Ile Ala Arg Ser Ile Ala Arg Ala Leu
 340 345 350

Asn Arg Glu Tyr Phe Arg Phe Ser Val Gly Gly Met Thr Asp Val Ala
 355 360 365

Glu Ile Lys Gly His Arg Arg Thr Tyr Val Gly Ala Met Pro Gly Lys
 370 375 380

Ile Ile Gln Cys Leu Lys Lys Thr Lys Thr Glu Asn Pro Leu Ile Leu
 385 390 395 400

Ile Asp Glu Val Asp Lys Ile Gly Arg Gly Tyr Gln Gly Asp Pro Ser
 405 410 415

Ser Ala Leu Leu Glu Leu Leu Asp Pro Glu Gln Asn Ala Asn Phe Leu
 420 425 430

Asp His Tyr Leu Asp Val Pro Val Asp Leu Ser Lys Val Leu Phe Ile
 435 440 445

Cys Thr Ala Asn Val Thr Asp Thr Ile Pro Glu Pro Leu Arg Asp Arg
 450 455 460

Met Glu Met Ile Asn Val Ser Gly Tyr Val Ala Gln Glu Lys Leu Ala
 465 470 475 480

Ile Ala Glu Arg Tyr Leu Val Pro Gln Ala Arg Ala Leu Cys Gly Leu
 485 490 495

Asp Glu Ser Lys Ala Lys Leu Ser Ser Asp Val Leu Thr Leu Leu Ile
 500 505 510

Lys Gln Tyr Cys Arg Glu Ser Gly Val Arg Asn Leu Gln Lys Gln Val
 515 520 525

257

Glu Lys Val Leu Arg Lys Ser Ala Tyr Lys Ile Val Ser Gly Glu Ala
 530 535 540

Glu Ser Val Glu Val Thr Pro Glu Asn Leu Gln Asp Phe Val Gly Lys
 545 550 555 560

Pro Val Phe Thr Val Glu Arg Met Tyr Asp Val Thr Pro Pro Gly Val
 565 570 575

Val Met Gly Leu Ala Trp Thr Ala Met Gly Gly Ser Thr Leu Phe Val
 580 585 590

Glu Thr Ser Leu Arg Arg Pro Gln Asp Lys Asp Ala Lys Gly Asp Lys
 595 600 605

Asp Gly Ser Leu Glu Val Thr Gly Gln Leu Gly Glu Val Met Lys Glu
 610 615 620

Ser Ala Arg Ile Ala Tyr Thr Phe Ala Arg Ala Phe Leu Met Gln His
 625 630 635 640

Ala Pro Ala Asn Asp Tyr Leu Val Thr Ser His Ile His Leu His Val
 645 650 655

Pro Glu Gly Ala Thr Pro Lys Asp Gly Pro Ser Ala Gly Cys Thr Ile
 660 665 670

Val Thr Ala Leu Leu Ser Leu Ala Met Gly Arg Pro Val Arg Gln Asn
 675 680 685

Leu Ala Met Thr Gly Glu Val Ser Leu Thr Gly Lys Ile Leu Pro Val
 690 695 700

Gly Gly Ile Lys Glu Lys Thr Ile Ala Ala Lys Arg Ala Gly Val Thr
 705 710 715 720

Cys Ile Val Leu Pro Ala Glu Asn Lys Lys Asp Phe Tyr Asp Leu Ala
 725 730 735

Ala Phe Ile Thr Glu Gly Leu Glu Val His Phe Val Glu His Tyr Arg
 740 745 750

Glu Ile Phe Asp Ile Ala Phe Pro Asp Glu Gln Ala Glu Ala Leu Ala
 755 760 765

258

Val Glu Arg
770

<210> 188
<211> 848
<212> PRT
<213> Homo sapien

<400> 188

Met Ala Ala Ser Thr Gly Tyr Val Arg Leu Trp Gly Ala Ala Arg Cys
1 5 10 15

Trp Val Leu Arg Arg Pro Met Leu Ala Ala Gly Gly Arg Val Pro
20 25 30

Thr Ala Ala Gly Ala Trp Leu Leu Arg Gly Gln Arg Thr Cys Asp Ala
35 40 45

Ser Pro Pro Trp Ala Leu Trp Gly Arg Gly Pro Ala Ile Gly Gly Gln
50 55 60

Trp Arg Gly Phe Trp Glu Ala Ser Ser Arg Gly Gly Gly Ala Phe Ser
65 70 75 80

Gly Gly Glu Asp Ala Ser Glu Gly Gly Ala Glu Glu Gly Ala Gly Gly
85 90 95

Ala Gly Gly Ser Ala Gly Ala Gly Glu Gly Pro Val Ile Thr Ala Leu
100 105 110

Thr Pro Met Thr Ile Pro Asp Val Phe Pro His Leu Pro Leu Ile Ala
115 120 125

Ile Thr Arg Asn Pro Val Phe Pro Arg Phe Ile Lys Ile Ile Glu Val
130 135 140

Lys Asn Lys Lys Leu Val Glu Leu Leu Arg Arg Lys Val Arg Leu Ala
145 150 155 160

Gln Pro Tyr Val Gly Val Phe Leu Lys Arg Asp Asp Ser Asn Glu Ser
165 170 175

Asp Val Val Glu Ser Leu Asp Glu Ile Tyr His Thr Gly Thr Phe Ala
180 185 190

Gln Ile His Glu Met Gln Asp Leu Gly Asp Lys Leu Arg Met Ile Val
195 200 205

259

Met Gly His Arg Arg Val His Ile Ser Arg Gln Leu Glu Val Glu Pro
 210 215 220

Glu Glu Pro Glu Ala Glu Asn Lys His Lys Pro Arg Arg Lys Ser Lys
 225 230 235 240

Arg Gly Lys Lys Glu Ala Glu Asp Glu Leu Ser Ala Arg His Pro Ala
 245 250 255

Glu Leu Ala Met Glu Pro Thr Pro Glu Leu Pro Ala Glu Val Leu Met
 260 265 270

Val Glu Val Glu Asn Val Val His Glu Asp Phe Gln Val Thr Glu Glu
 275 280 285

Val Lys Ala Leu Thr Ala Glu Ile Val Lys Thr Ile Arg Asp Ile Ile
 290 295 300

Ala Leu Asn Pro Leu Tyr Arg Glu Ser Val Leu Gln Met Met Gln Ala
 305 310 315 320

Gly Gln Arg Val Val Asp Asn Pro Ile Tyr Leu Ser Asp Met Gly Ala
 325 330 335

Ala Leu Thr Gly Ala Glu Ser His Glu Leu Gln Asp Val Leu Glu Glu
 340 345 350

Thr Asn Ile Pro Lys Arg Leu Tyr Lys Ala Leu Ser Leu Leu Lys Lys
 355 360 365

Glu Phe Glu Leu Ser Lys Leu Gln Gln Arg Leu Gly Arg Glu Val Glu
 370 375 380

Glu Lys Ile Lys Gln Thr His Arg Lys Tyr Leu Leu Gln Glu Gln Leu
 385 390 395 400

Lys Ile Ile Lys Lys Glu Leu Gly Leu Glu Lys Asp Asp Lys Asp Ala
 405 410 415

Ile Glu Glu Lys Phe Arg Glu Arg Leu Lys Glu Leu Val Val Pro Lys
 420 425 430

His Val Met Asp Val Val Asp Glu Glu Leu Ser Lys Leu Gly Leu Leu
 435 440 445

260

Asp Asn His Ser Ser Glu Phe Asn Val Thr Arg Asn Tyr Leu Asp Trp
 450 455 460

Leu Thr Ser Ile Pro Trp Gly Lys Tyr Ser Asn Glu Asn Leu Asp Leu
 465 470 475 480

Ala Arg Ala Gln Ala Val Leu Glu Glu Asp His Tyr Gly Met Glu Asp
 485 490 495

Val Lys Lys Arg Ile Leu Glu Phe Ile Ala Val Ser Gln Leu Arg Gly
 500 505 510

Ser Thr Gln Gly Lys Ile Leu Cys Phe Tyr Gly Pro Pro Gly Val Gly
 515 520 525

Lys Thr Ser Ile Ala Arg Ser Ile Ala Arg Ala Leu Asn Arg Glu Tyr
 530 535 540

Phe Arg Phe Ser Val Gly Gly Met Thr Asp Val Ala Glu Ile Lys Gly
 545 550 555 560

His Arg Arg Thr Tyr Val Gly Ala Met Pro Gly Lys Ile Ile Gln Cys
 565 570 575

Leu Lys Lys Thr Lys Thr Glu Asn Pro Leu Ile Leu Ile Asp Glu Val
 580 585 590

Asp Lys Ile Gly Arg Gly Tyr Gln Gly Asp Pro Ser Ser Ala Leu Leu
 595 600 605

Glu Leu Leu Asp Pro Glu Gln Asn Ala Asn Phe Leu Asp His Tyr Leu
 610 615 620

Asp Val Pro Val Asp Leu Ser Lys Val Leu Phe Ile Cys Thr Ala Asn
 625 630 635 640

Val Thr Asp Thr Ile Pro Glu Pro Leu Arg Asp Arg Met Glu Met Ile
 645 650 655

Asn Val Ser Gly Tyr Val Ala Gln Glu Lys Leu Ala Ile Ala Glu Arg
 660 665 670

Tyr Leu Val Pro Gln Ala Arg Ala Leu Cys Gly Leu Asp Glu Ser Lys
 675 680 685

261

Ala Lys Leu Ser Ser Asp Val Leu Thr Leu Leu Ile Lys Gln Tyr Cys
 690 695 700

Arg Glu Ser Gly Val Arg Asn Leu Gln Lys Gln Val Glu Lys Val Leu
 705 710 715 720

Arg Lys Ser Ala Tyr Lys Ile Val Ser Gly Glu Ala Glu Ser Val Glu
 725 730 735

Val Thr Pro Glu Asn Leu Gln Asp Phe Val Gly Lys Pro Val Phe Thr
 740 745 750

Val Glu Arg Met Tyr Asp Val Thr Pro Pro Gly Val Val Met Gly Leu
 755 760 765

Ala Trp Thr Ala Met Gly Glu Arg Gly Gly Gly Arg Arg Pro Gln Ser
 770 775 780

His Ser His Phe Tyr Pro Arg Thr Ser Arg Ser His Leu Val His Leu
 785 790 795 800

Cys Ser Gly Pro Gln Val Ala Leu Asn Gly Leu Trp Arg Gly Val Val
 805 810 815

Cys Trp Glu Pro Arg Gly Ser Gly Leu Arg Glu Gly Lys Ala Val Thr
 820 825 830

His Gly Gly Gly Ser Thr Pro Trp Ala Leu Trp Ile Trp Val Pro Leu
 835 840 845

<210> 189
 <211> 124
 <212> PRT
 <213> Homo sapien

<400> 189

Met Val Phe Leu His Val Gly Gln Ala Gly Leu Glu Leu Pro Thr Ser
 1 5 10 15

Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly Met Thr Glu Leu
 20 25 30

Glu Leu Gly Pro Ser Pro Arg Leu Gln Pro Ile Arg Arg His Pro Lys
 35 40 45

Glu Leu Pro Gln Tyr Gly Gly Pro Gly Lys Asp Ile Phe Glu Asp Gln
 50 55 60

262

Leu Tyr Leu Pro Val His Ser Asp Gly Ile Ser Val His Gln Met Phe
65 70 75 80

Thr Met Ala Thr Ala Glu His Arg Ser Asn Ser Ser Ile Ala Gly Lys
85 90 95

Met Leu Thr Lys Val Glu Lys Asn His Glu Lys Glu Lys Ser Gln His
100 105 110

Leu Glu Gly Ser Ala Ser Ser Ser Leu Ser Ser Asp
115 120

<210> 190

<211> 296

<212> PRT

<213> Homo sapien

<400> 190

Met Ser Thr Glu Arg Thr Ser Trp Thr Ser Leu Ser Thr Ile Gln Lys
1 5 10 15

Ile Ala Leu Gly Leu Gly Ile Pro Ala Ser Ala Thr Val Ala Tyr Ile
20 25 30

Leu Tyr Arg Arg Tyr Arg Glu Ser Arg Glu Glu Arg Leu Thr Phe Val
35 40 45

Gly Glu Asp Asp Ile Glu Ile Glu Met Arg Val Pro Gln Glu Ala Val
50 55 60

Lys Leu Ile Ile Gly Arg Gln Gly Ala Asn Ile Lys Gln Leu Arg Lys
65 70 75 80

Gln Thr Gly Ala Arg Ile Asp Val Asp Thr Glu Asp Val Gly Asp Glu
85 90 95

Arg Val Leu Leu Ile Ser Gly Phe Pro Val Gln Val Cys Lys Ala Lys
100 105 110

Ala Ala Ile His Gln Ile Leu Thr Glu Asn Thr Pro Val Ser Glu Gln
115 120 125

Leu Ser Val Pro Gln Arg Ser Val Gly Arg Ile Ile Gly Arg Gly Gly
130 135 140

263

Glu Thr Ile Arg Ser Ile Cys Lys Ala Ser Gly Ala Lys Ile Thr Cys
 145 150 155 160

Asp Lys Glu Ser Glu Gly Thr Leu Leu Leu Ser Arg Leu Ile Lys Ile
 165 170 175

Ser Gly Thr Gln Lys Glu Val Ala Ala Ala Lys His Leu Ile Leu Glu
 180 185 190

Lys Val Ser Glu Asp Glu Glu Leu Arg Lys Arg Ile Ala His Ser Ala
 195 200 205

Glu Thr Arg Val Pro Arg Lys Gln Pro Ile Ser Val Arg Arg Glu Asp
 210 215 220

Met Thr Glu Pro Gly Gly Ala Gly Glu Pro Ala Leu Trp Lys Asn Thr
 225 230 235 240

Ser Ser Ser Met Glu Pro Thr Ala Pro Leu Val Thr Pro Pro Pro Lys
 245 250 255

Gly Gly Gly Asp Met Ala Val Val Val Ser Lys Glu Gly Ser Trp Glu
 260 265 270

Lys Pro Ser Asp Asp Ser Phe Gln Lys Ser Glu Ala Gln Ala Ile Pro
 275 280 285

Glu Met Pro Met Phe Glu Ser Met
 290 295

<210> 191

<211> 195

<212> PRT

<213> Homo sapien

<400> 191

Ala Arg Tyr Glu Ala Trp Gly Glu Ser Ala Glu Ala His Val Leu Glu
 1 5 10 15

Gly Pro Asp Thr Asn Thr Thr Ile Ile Gln Leu Gln Pro Leu Gln Glu
 20 25 30

Pro Glu Ser Trp Ala Arg Thr Gln Ser Gly Leu Gln Ser Tyr Leu Leu
 35 40 45

Gln Phe His Gly Leu Val Arg Leu Val His Gln Glu Arg Thr Leu Ala
 50 55 60

264

Phe Pro Leu Thr Ile Arg Cys Phe Leu Gly Cys Glu Leu Pro Pro Glu
65 70 75 80

Gly Ser Arg Ala His Val Phe Phe Glu Val Ala Val Asn Gly Ser Ser
85 90 95

Phe Val Ser Phe Arg Pro Glu Arg Ala Leu Trp Gln Ala Asp Thr Gln
100 105 110

Val Thr Ser Gly Val Val Thr Phe Thr Leu Gln Gln Leu Asn Ala Tyr
115 120 125

Asn Arg Thr Arg Tyr Glu Leu Arg Glu Phe Leu Glu Asp Thr Cys Val
130 135 140

Gln Tyr Val Gln Lys His Ile Ser Ala Glu Asn Thr Lys Gly Ser Gln
145 150 155 160

Thr Ser Arg Ser Tyr Thr Ser Leu Val Leu Gly Val Leu Val Gly Ser
165 170 175

Phe Ile Ile Ala Gly Val Ala Val Gly Ile Phe Leu Cys Thr Gly Gly
180 185 190

Arg Arg Cys
195

<210> 192
<211> 194
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (6)..(7)
<223> X=any amino acid

<400> 192

Leu Gly Thr Gly Arg Xaa Xaa Ser Ala Glu Ala His Val Leu Glu Gly
1 5 10 15

Pro Asp Thr Asn Thr Thr Ile Ile Gln Leu Gln Pro Leu Gln Glu Pro
20 25 30

Glu Ser Trp Ala Arg Thr Gln Ser Gly Leu Gln Ser Tyr Leu Leu Gln
35 40 45

265

Phe His Gly Leu Val Arg Leu Val His Gln Glu Arg Thr Leu Ala Phe
 50 55 60

Pro Leu Thr Ile Arg Cys Phe Leu Gly Cys Glu Leu Pro Pro Glu Gly
 65 70 75 80

Ser Arg Ala His Val Phe Phe Glu Val Ala Val Asn Gly Ser Ser Phe
 85 90 95

Val Ser Phe Arg Pro Glu Arg Ala Leu Trp Gln Ala Asp Thr Gln Val
 100 105 110

Thr Ser Gly Val Val Thr Phe Thr Leu Gln Gln Leu Asn Ala Tyr Asn
 115 120 125

Arg Thr Arg Tyr Glu Leu Arg Glu Phe Leu Glu Asp Thr Cys Val Gln
 130 135 140

Tyr Val Gln Lys His Ile Ser Ala Glu Asn Thr Lys Gly Ser Gln Thr
 145 150 155 160

Ser Arg Ser Tyr Thr Ser Leu Val Leu Gly Val Leu Val Gly Ser Phe
 165 170 175

Ile Ile Ala Gly Val Ala Val Gly Ile Phe Leu Cys Thr Gly Gly Arg
 180 185 190

Arg Cys

<210> 193
 <211> 132
 <212> PRT
 <213> Homo sapien

<400> 193

Met Asn Tyr Thr Gln Arg Glu Leu Gln Met Ala Ala Pro Thr His Leu
 1 5 10 15

Asn His Thr Val Val Gly Thr Pro Cys Gly Asn Gln Thr Leu Ala Thr
 20 25 30

Thr Arg Arg Lys His Leu Ala Trp Arg Glu Arg Arg Pro Ala His Thr
 35 40 45

266

Thr Pro Ala Arg Ala Arg Asp Gly Asn Pro Asn Ile Gly Val Gly Ala
 50 55 60

Ala Asp Lys Pro Pro Ser Leu Leu Asn His Ala Arg Arg Ser Ser Leu
 65 70 75 80

Pro Asn Arg Pro Pro Arg Ser Thr Gly Gly Asp Glu Ser Leu Ile Thr
 85 90 95

His Asn Pro Ser Tyr Ser His Gly Arg Arg Ala Ile Leu His Ala Cys
 100 105 110

Val Val Pro His His Thr Glu Arg Arg Val Ala Ser Ile Ile Cys Arg
 115 120 125

Pro Gly Pro Arg
 130

<210> 194
 <211> 199
 <212> PRT
 <213> Homo sapien

<400> 194

Ile Ile Thr Ile Lys Leu Phe Lys Lys Lys Lys Lys Lys Gln Thr Lys
 1 5 10 15

Asn Ile Lys Thr Lys Lys Gln Lys Glu Lys Lys Lys Lys Gln Asn Arg
 20 25 30

Gly Ala Gly Ala Pro Gln Lys Lys Ser Arg Pro Arg Gly Ala Ala Pro
 35 40 45

Ile Thr Ala Arg Pro Pro Gly Phe Leu Val Ser Thr Gln Gln Gly Gly
 50 55 60

Ala Pro His Lys Asn Glu Arg Ala His Arg Ser His Asn Tyr Thr Gln
 65 70 75 80

Arg Glu Leu Arg Trp Pro Arg Pro His Thr Ser Thr Thr Gln Ser Trp
 85 90 95

Val His Pro Ala Ala Thr Lys Arg Trp Pro Gln Pro Gly Gly Asn Ile
 100 105 110

Leu Arg Gly Glu Lys Gly Asp Pro Leu Thr Leu Pro Gln Arg Glu Arg
 115 120 125

267

Gly Thr Ala Thr Gln Thr Ser Val Trp Gly Pro Pro Thr Asn Leu Pro
 130 135 140

His Ser Ser Thr Met Arg Asp Asp Leu His Tyr Gln Ile Ala Pro Leu
 145 150 155 160

Ala Arg Arg Ala Ala Thr Asn Arg Ser Ser His Thr Ile His Leu Ile
 165 170 175

His Thr Ala Val Ala Leu Ser Ser Thr Arg Val Trp Cys Leu Ile Thr
 180 185 190

Pro Asn Asp Gly Ser His Gln
 195

<210> 195
 <211> 259
 <212> PRT
 <213> Homo sapien

<400> 195

Met Glu Gly Arg Arg Gln Ala Arg Arg Leu Arg Gln Leu Ala Gly Ala
 1 5 10 15

Gly Ala Gln Gly Gly Ser Pro Ile Val Glu Ala Ala Glu Asn Cys His
 20 25 30

Gly Ala Ala Ser Val Gln Arg Ala Ser Leu Ile Tyr Ser Gly Arg Val
 35 40 45

Cys Ile Trp Gly Gly Val Gln Gly Ala Asp Lys Asp Arg Arg Ala Pro
 50 55 60

Gly Ala Ala Ala Gly Gly Ala Lys Thr Gly Thr Arg Met Ser Ala Pro
 65 70 75 80

Gln Arg Pro Trp Ala Leu Ala Ala Gly Ala Arg Arg Thr Pro Arg Glu
 85 90 95

Ala Gly Ile Ser Lys Ala Val Arg Pro Glu Ala Arg Pro Arg Leu Arg
 100 105 110

Thr Lys Thr Glu Leu Glu Asp Leu Gln Lys Lys Pro Pro Pro Tyr Leu
 115 120 125

268

Arg Asn Leu Ser Ser Asp Asp Ala Asn Val Leu Val Trp His Ala Leu
130 135 140

Leu Leu Pro Asp Gln Pro Pro Tyr His Leu Lys Ala Phe Asn Leu Arg
145 150 155 160

Ile Ser Phe Pro Pro Glu Tyr Pro Phe Lys Pro Pro Met Ile Lys Phe
165 170 175

Thr Thr Lys Ile Tyr His Pro Asn Val Asp Glu Asn Gly Gln Ile Cys
180 185 190

Leu Pro Ile Ile Ser Ser Glu Asn Trp Lys Pro Cys Thr Lys Thr Cys
195 200 205

Gln Val Leu Glu Ala Leu Asn Val Leu Val Asn Arg Pro Asn Ile Arg
210 215 220

Glu Pro Leu Arg Met Asp Leu Ala Asp Leu Leu Thr Gln Asn Pro Glu
225 230 235 240

Leu Phe Arg Lys Asn Ala Glu Glu Phe Thr Leu Arg Phe Gly Val Asp
245 250 255

Arg Pro Ser

<210> 196
<211> 156
<212> PRT
<213> Homo sapien

<400> 196

Met Arg Arg Trp Thr Trp Lys Ala Ser Trp Ser Ser Glu Leu Glu Asp
1 5 10 15

Leu Gln Lys Lys Pro Pro Pro Tyr Leu Arg Asn Leu Ser Ser Asp Asp
20 25 30

Ala Asn Val Leu Val Trp His Ala Leu Leu Leu Pro Asp Gln Pro Pro
35 40 45

Tyr His Leu Lys Ala Phe Asn Leu Arg Ile Ser Phe Pro Pro Glu Tyr
50 55 60

Pro Phe Lys Pro Pro Met Ile Lys Phe Thr Thr Lys Ile Tyr His Pro
65 70 75 80

269

Asn Val Asp Glu Asn Gly Gln Ile Cys Leu Pro Ile Ile Ser Ser Glu
85 90 95

Asn Trp Lys Pro Cys Thr Lys Thr Cys Gln Val Leu Glu Ala Leu Asn
100 105 110

Val Leu Val Asn Arg Pro Asn Ile Arg Glu Pro Leu Arg Met Asp Leu
115 120 125

Ala Asp Leu Leu Thr Gln Asn Pro Glu Leu Phe Arg Lys Asn Ala Glu
130 135 140

Glu Phe Thr Leu Arg Phe Gly Val Asp Arg Pro Ser
145 150 155

<210> 197

<211> 168

<212> PRT

<213> Homo sapien

<400> 197

Asn Leu Gly Gln Ser Ser Leu Ser Ile Leu Trp Arg Lys Arg Cys Gly
1 5 10 15

Gly Gly Pro Gly Arg Pro Pro Gly Glu Leu Glu Asp Leu Gln Lys Lys
20 25 30

Pro Pro Pro Tyr Leu Arg Asn Leu Ser Ser Asp Asp Ala Asn Val Leu
35 40 45

Val Trp His Ala Leu Leu Leu Pro Asp Gln Pro Pro Tyr His Leu Lys
50 55 60

Ala Phe Asn Leu Arg Ile Ser Phe Pro Pro Glu Tyr Pro Phe Lys Pro
65 70 75 80

Pro Met Ile Lys Phe Thr Thr Lys Ile Tyr His Pro Asn Val Asp Glu
85 90 95

Asn Gly Gln Ile Cys Leu Pro Ile Ile Ser Ser Glu Asn Trp Lys Pro
100 105 110

Cys Thr Lys Thr Cys Gln Val Leu Glu Ala Leu Asn Val Leu Val Asn
115 120 125

270

Arg Pro Asn Ile Arg Glu Pro Leu Arg Met Asp Leu Ala Asp Leu Leu
 130 135 140

Thr Gln Asn Pro Glu Leu Phe Arg Lys Asn Ala Glu Glu Phe Thr Leu
 145 150 155 160

Arg Phe Gly Val Asp Arg Pro Ser
 165

<210> 198
 <211> 137
 <212> PRT
 <213> Homo sapien

<400> 198

Met Glu Gly Arg Arg Gln Gly Asn Leu Ser Ser Asp Asp Ala Asn Val
 1 5 10 15

Leu Val Trp His Ala Leu Leu Leu Pro Asp Gln Pro Pro Tyr His Leu
 20 25 30

Lys Ala Phe Asn Leu Arg Ile Ser Phe Pro Pro Glu Tyr Pro Phe Lys
 35 40 45

Pro Pro Met Ile Lys Phe Thr Thr Lys Ile Tyr His Pro Asn Val Asp
 50 55 60

Glu Asn Gly Gln Ile Cys Leu Pro Ile Ile Ser Ser Glu Asn Trp Lys
 65 70 75 80

Pro Cys Thr Lys Thr Cys Gln Val Leu Glu Ala Leu Asn Val Leu Val
 85 90 95

Asn Arg Pro Asn Ile Arg Glu Pro Leu Arg Met Asp Leu Ala Asp Leu
 100 105 110

Leu Thr Gln Asn Pro Glu Leu Phe Arg Lys Asn Ala Glu Glu Phe Thr
 115 120 125

Leu Arg Phe Gly Val Asp Arg Pro Ser
 130 135

<210> 199
 <211> 237
 <212> PRT
 <213> Homo sapien

<400> 199

271

Met Met Ala Ser Met Arg Val Val Lys Glu Leu Glu Asp Leu Gln Lys
 1 5 10 15

Lys Pro Pro Pro Tyr Leu Arg Asn Leu Ser Ser Asp Asp Ala Asn Val
 20 25 30

Leu Val Trp His Ala Leu Leu Leu Pro Glu Ala Glu Val Ala Val Ser
 35 40 45

Arg Asp His Ala Ile Ala Leu Gln Pro Gly Gln Gln Ser Glu Thr Pro
 50 55 60

Ser Gln Lys Lys Lys Lys Lys Glu Ala Trp His Gln His Leu Leu Leu
 65 70 75 80

Met Arg Pro Ser Gly Ser Phe His Ser Trp Trp Lys Ala Lys Gly Ser
 85 90 95

His Val Tyr Arg Ser His Ala Arg Glu Glu Val Lys Glu Arg Glu Ser
 100 105 110

Glu Gln Val Pro Gly Ser Ser Lys Gln Pro Ala Phe Ser Asp Gln Pro
 115 120 125

Pro Tyr His Leu Lys Ala Phe Asn Leu Arg Ile Ser Phe Pro Pro Glu
 130 135 140

Tyr Pro Phe Lys Pro Pro Met Ile Lys Phe Thr Thr Lys Ile Tyr His
 145 150 155 160

Pro Asn Val Asp Glu Asn Gly Gln Ile Cys Leu Pro Ile Ile Ser Ser
 165 170 175

Glu Asn Trp Lys Pro Cys Thr Lys Thr Cys Gln Val Leu Glu Ala Leu
 180 185 190

Asn Val Leu Val Asn Arg Pro Asn Ile Arg Glu Pro Leu Arg Met Asp
 195 200 205

Leu Ala Asp Leu Leu Thr Gln Asn Pro Glu Leu Phe Arg Lys Asn Ala
 210 215 220

Glu Glu Phe Thr Leu Arg Phe Gly Val Asp Arg Pro Ser
 225 230 235

272

<210> 200
 <211> 156
 <212> PRT
 <213> Homo sapien

<400> 200

Gly Pro Gln Glu Ala Ser Thr His Gly Gly Arg Gln Arg Gly Ala Thr
 1 5 10 15

Cys Thr Asp His Ile Ala Arg Glu Glu Val Lys Glu Arg Glu Ser Glu
 20 25 30

Gln Val Pro Gly Ser Ser Lys Gln Pro Ala Phe Ser Asp Gln Pro Pro
 35 40 45

Tyr His Leu Lys Ala Phe Asn Leu Arg Ile Ser Phe Pro Pro Glu Tyr
 50 55 60

Pro Phe Lys Pro Pro Met Ile Lys Phe Thr Thr Lys Ile Tyr His Pro
 65 70 75 80

Asn Val Asp Glu Asn Gly Gln Ile Cys Leu Pro Ile Ile Ser Ser Glu
 85 90 95

Asn Trp Lys Pro Cys Thr Lys Thr Cys Gln Val Leu Glu Ala Leu Asn
 100 105 110

Val Leu Val Asn Arg Pro Asn Ile Arg Glu Pro Leu Arg Met Asp Leu
 115 120 125

Ala Asp Leu Leu Thr Gln Asn Pro Glu Leu Phe Arg Lys Asn Ala Glu
 130 135 140

Glu Phe Thr Leu Arg Phe Gly Val Asp Arg Pro Ser
 145 150 155

<210> 201
 <211> 88
 <212> PRT
 <213> Homo sapien

<400> 201

Met Val Gln Ala Gly Pro Ser Ser Cys Ser Ile Ser Gly Asp Pro Gly
 1 5 10 15

Leu Pro Arg Arg Trp Arg Pro Ala Gln Val Val Arg Pro Gly Arg Leu
 20 25 30

273

Arg Ile Arg Gly Trp Ser Arg Arg Ile Pro Lys Ala Glu Val Gly Ser
 35 40 45

Pro Gly Asp Ser Gln Leu Leu Ser Leu Trp Arg Arg Gly Pro Val Thr
 50 55 60

Glu Ala Pro Phe Ser Asn Pro Gly Ala Ala Phe Gln Arg Leu Asn Phe
 65 70 75 80

Ser Asn His Cys Phe Asn Ser Phe
 85

<210> 202
 <211> 40
 <212> PRT
 <213> Homo sapien

<400> 202

Met Glu Lys Gly Val Gly Gly Gln Pro Arg Gly Arg Arg Arg Ile Tyr
 1 5 10 15

Asn Ile Phe Phe Arg His Arg Cys Tyr Arg Lys Met Cys Glu Arg Ser
 20 25 30

Gly Cys Ala Ala Arg Thr Gly Ala
 35 40

<210> 203
 <211> 60
 <212> PRT
 <213> Homo sapien

<400> 203

Gly Pro Glu Lys Trp Arg Arg Gly Trp Gly Asp Ser His Val Ala Ala
 1 5 10 15

Gly Gly Phe Thr Thr Phe Ser Phe Ala Ile Asp Val Ile Ala Lys Cys
 20 25 30

Val Arg Glu Ala Ala Ala Gln Pro Gly Arg Glu Arg Glu Gly Ala Gly
 35 40 45

Gln Arg Phe Pro Pro Thr Gly Asn Leu Met Gly Leu
 50 55 60

<210> 204
 <211> 213

274

<212> PRT
 <213> Homo sapien

<220>
 <221> MISC_FEATURE
 <222> (5)..(5)
 <223> X=any amino acid

<400> 204

Met Pro Gln Asn Xaa Gly Val Ile Gly Leu Arg His His Phe Ala Ile
 1 5 10 15

His Tyr Pro Ala Gly Gly Gly Leu Trp Asp Gly Leu His Gly Val Ala
 20 25 30

Ala Val Gln Gly Ile Thr Lys Ile Lys Val Leu Ala Ile Tyr Ser Phe
 35 40 45

Cys Ser Gln Ile Cys Asp Pro Arg Thr Thr Gly Ala Phe Trp Gln Thr
 50 55 60

Trp Lys Asp Phe Glu Val Arg His Gly Asn Glu Asp Thr Ile Lys Glu
 65 70 75 80

Met Leu Arg Ile Arg Arg Ser Val Gln Ala Thr Tyr Asn Thr Gln Val
 85 90 95

Asn Phe Met Ala Ser Gln Met Leu Lys Val Ser Gly Ser Ala Thr Gly
 100 105 110

Thr Val Ser Asp Leu Ala Pro Gly Gln Ser Gly Met Asp Asp Met Lys
 115 120 125

Leu Leu Glu Gln Arg Ala Glu Gln Leu Ala Ala Glu Ala Glu Arg Asp
 130 135 140

Gln Pro Leu Arg Ala Gln Ser Lys Ile Leu Phe Val Arg Ser Asp Ala
 145 150 155 160

Ser Arg Glu Glu Leu Ala Glu Leu Ala Gln Gln Val Asn Pro Glu Glu
 165 170 175

Ile Gln Leu Gly Glu Asp Glu Asp Glu Asp Glu Met Asp Leu Glu Pro
 180 185 190

Asn Glu Val Arg Leu Glu Gln Gln Ser Val Pro Ala Ala Val Phe Gly
 195 200 205

275

Ser Leu Lys Glu Asp
210

<210> 205
<211> 458
<212> PRT
<213> Homo sapien

<400> 205

Met Ile Asp His Tyr Arg Gly Met Gly Pro Leu Met Leu Leu Glu Arg
1 5 10 15

Arg Ser Val Met Asp Arg Gly Arg Gly Arg Tyr Gln Tyr Ser Pro Gln
20 25 30

Asn Gln His Val Glu Gln Gln Pro His Tyr Thr His Lys Pro Thr Leu
35 40 45

Glu Tyr Ser Pro Phe Pro Ile Pro Pro Gln Ser Pro Ala Tyr Glu Pro
50 55 60

Asn Leu Phe Asp Gly Pro Glu Ser Gln Phe Cys Pro Asn Gln Ser Leu
65 70 75 80

Val Ser Leu Leu Gly Asp Gln Arg Glu Ser Glu Asn Ile Ala Asn Pro
85 90 95

Met Gln Thr Ser Ser Ser Val Gln Gln Gln Asn Asp Ala His Leu His
100 105 110

Ser Phe Ser Met Met Pro Ser Ser Ala Cys Glu Ala Met Val Gly His
115 120 125

Glu Met Ala Ser Asp Ser Ser Asn Thr Ser Leu Pro Phe Ser Asn Met
130 135 140

Gly Asn Pro Met Asn Thr Thr Gln Leu Gly Lys Ser Leu Phe Gln Trp
145 150 155 160

Gln Val Glu Gln Glu Glu Ser Lys Leu Ala Asn Ile Ser Gln Asp Gln
165 170 175

Phe Leu Ser Lys Asp Ala Asp Gly Asp Thr Phe Leu His Ile Ala Val
180 185 190

276

Ala Gln Gly Arg Arg Ala Leu Ser Tyr Val Leu Ala Arg Lys Met Asn
 195 200 205

Ala Leu His Met Leu Asp Ile Lys Glu His Asn Gly Gln Ser Ala Phe
 210 215 220

Gln Val Ala Val Ala Ala Asn Gln His Leu Ile Val Gln Asp Leu Val
 225 230 235 240

Asn Ile Gly Ala Gln Val Asn Thr Thr Asp Cys Trp Gly Arg Thr Pro
 245 250 255

Leu His Val Cys Ala Glu Lys Gly His Ser Gln Val Leu Gln Ala Ile
 260 265 270

Gln Lys Gly Ala Val Gly Ser Asn Gln Phe Val Asp Leu Glu Ala Thr
 275 280 285

Asn Tyr Asp Gly Leu Thr Pro Leu His Cys Ala Val Ile Ala His Asn
 290 295 300

Ala Val Val His Glu Leu Gln Arg Asn Gln Gln Pro His Ser Pro Glu
 305 310 315 320

Val Gln Glu Leu Leu Leu Lys Asn Lys Ser Leu Val Asp Thr Ile Lys
 325 330 335

Cys Leu Ile Gln Met Gly Ala Ala Val Glu Ala Lys Asp Arg Lys Ser
 340 345 350

Gly Arg Thr Ala Leu His Leu Ala Ala Glu Glu Ala Asn Leu Glu Leu
 355 360 365

Ile Arg Leu Phe Leu Glu Leu Pro Ser Cys Leu Ser Phe Val Asn Ala
 370 375 380

Lys Ala Tyr Asn Gly Asn Thr Ala Leu His Val Ala Ala Ser Leu Gln
 385 390 395 400

Tyr Arg Leu Thr Gln Leu Asp Ala Val Arg Leu Leu Met Arg Lys Gly
 405 410 415

Ala Asp Pro Ser Thr Arg Asn Leu Glu Asn Glu Gln Pro Val His Leu
 420 425 430

Val Pro Asp Gly Pro Val Gly Glu Gln Ile Arg Arg Ile Leu Lys Gly

277

435

440

445

Lys Ser Ile Gln Gln Arg Ala Pro Pro Tyr
 450 455

<210> 206

<211> 439

<212> PRT

<213> Homo sapien

<400> 206

Trp Ile Val Val Ala Ala Arg Tyr Gln Tyr Ser Pro Gln Asn Gln His
 1 5 10 15

Val Glu Gln Gln Pro His Tyr Thr His Lys Pro Thr Leu Glu Tyr Ser
 20 25 30

Pro Phe Pro Ile Pro Pro Gln Ser Pro Ala Tyr Glu Pro Asn Leu Phe
 35 40 45

Asp Gly Pro Glu Ser Gln Phe Cys Pro Asn Gln Ser Leu Val Ser Leu
 50 55 60

Leu Gly Asp Gln Arg Glu Ser Glu Asn Ile Ala Asn Pro Met Gln Thr
 65 70 75 80

Ser Ser Ser Val Gln Gln Gln Asn Asp Ala His Leu His Ser Phe Ser
 85 90 95

Met Met Pro Ser Ser Ala Cys Glu Ala Met Val Gly His Glu Met Ala
 100 105 110

Ser Asp Ser Ser Asn Thr Ser Leu Pro Phe Ser Asn Met Gly Asn Pro
 115 120 125

Met Asn Thr Thr Gln Leu Gly Lys Ser Leu Phe Gln Trp Gln Val Glu
 130 135 140

Gln Glu Glu Ser Lys Leu Ala Asn Ile Ser Gln Asp Gln Phe Leu Ser
 145 150 155 160

Lys Asp Ala Asp Gly Asp Thr Phe Leu His Ile Ala Val Ala Gln Gly
 165 170 175

Arg Arg Ala Leu Ser Tyr Val Leu Ala Arg Lys Met Asn Ala Leu His
 180 185 190

278

Met Leu Asp Ile Lys Glu His Asn Gly Gln Ser Ala Phe Gln Val Ala
 195 200 205

Val Ala Ala Asn Gln His Leu Ile Val Gln Asp Leu Val Asn Ile Gly
 210 215 220

Ala Gln Val Asn Thr Thr Asp Cys Trp Gly Arg Thr Pro Leu His Val
 225 230 235 240

Cys Ala Glu Lys Gly His Ser Gln Val Leu Gln Ala Ile Gln Lys Gly
 245 250 255

Ala Val Gly Ser Asn Gln Phe Val Asp Leu Glu Ala Thr Asn Tyr Asp
 260 265 270

Gly Leu Thr Pro Leu His Cys Ala Val Ile Ala His Asn Ala Val Val
 275 280 285

His Glu Leu Gln Arg Asn Gln Gln Pro His Ser Pro Glu Val Gln Glu
 290 295 300

Leu Leu Leu Lys Asn Lys Ser Leu Val Asp Thr Ile Lys Cys Leu Ile
 305 310 315 320

Gln Met Gly Ala Ala Val Glu Ala Lys Asp Arg Lys Ser Gly Arg Thr
 325 330 335

Ala Leu His Leu Ala Ala Glu Glu Ala Asn Leu Glu Leu Ile Arg Leu
 340 345 350

Phe Leu Glu Leu Pro Ser Cys Leu Ser Phe Val Asn Ala Lys Ala Tyr
 355 360 365

Asn Gly Asn Thr Ala Leu His Val Ala Ala Ser Leu Gln Tyr Arg Leu
 370 375 380

Thr Gln Leu Asp Ala Val Arg Leu Leu Met Arg Lys Gly Ala Asp Pro
 385 390 395 400

Ser Thr Arg Asn Leu Glu Asn Glu Gln Pro Val His Leu Val Pro Asp
 405 410 415

Gly Pro Val Gly Glu Gln Ile Arg Arg Ile Leu Lys Gly Lys Ser Ile
 420 425 430

279

Gln Gln Arg Ala Pro Pro Tyr
435

<210> 207
<211> 130
<212> PRT
<213> Homo sapien

<400> 207

Met Gln Pro Leu Trp Leu Cys Trp Ala Leu Trp Val Leu Pro Leu Ala
1 5 10 15

Ser Pro Gly Ala Ala Leu Thr Gly Glu Gln Leu Leu Gly Ser Leu Leu
20 25 30

Arg Gln Leu Gln Leu Lys Glu Val Pro Thr Leu Asp Arg Ala Asp Met
35 40 45

Glu Glu Leu Val Ile Pro Thr His Val Arg Ala Gln Tyr Val Ala Leu
50 55 60

Leu Gln Arg Ser His Gly Asp Arg Ser Arg Gly Lys Arg Phe Ser Gln
65 70 75 80

Ser Phe Arg Glu Val Ala Gly Arg Phe Leu Ala Leu Glu Ala Ser Thr
85 90 95

His Leu Leu Val Phe Gly Met Glu Gln Arg Leu Pro Pro Asn Ser Glu
100 105 110

Leu Val Gln Ala Val Leu Arg Leu Phe Gln Glu Cys Thr Leu Thr Cys
115 120 125

Arg Gly
130

<210> 208
<211> 243
<212> PRT
<213> Homo sapien

<400> 208

Asp Pro Pro Ala Ala Phe Ser Arg Asp Ser Pro Thr Leu Pro Leu Ala
1 5 10 15

Pro Pro Gly Gln His His Ala Ala Pro Val Ala Leu Leu Gly Thr Leu
20 25 30

280

Gly Val Ala Pro Gly Gln Pro Arg Gly Arg Pro Asp Arg Gly Ala Ala
 35 40 45

Pro Gly Gln Pro Ala Ala Ala Ala Ala Gln Arg Gly Ala His Pro
 50 55 60

Gly Gln Gly Arg His Gly Gly Ala Gly His Pro His Pro Arg Glu Gly
 65 70 75 80

Pro Val Arg Gly Pro Ala Ala Ala Gln Pro Arg Gly Pro Leu Pro Arg
 85 90 95

Lys Glu Val Gln Pro Glu Leu Pro Arg Gly Gly Arg Gln Val Pro Gly
 100 105 110

Val Gly Gly Gln His Thr Pro Ala Gly Val Arg His Gly Ala Ala Ala
 115 120 125

Ala Ala Gln Gln Arg Ala Gly Ala Gly Arg Ala Ala Ala Leu Pro Gly
 130 135 140

Met Tyr Ile Asp Leu Gln Gly Met Lys Trp Ala Glu Asn Trp Val Leu
 145 150 155 160

Glu Pro Pro Gly Phe Leu Ala Tyr Glu Cys Val Gly Thr Cys Arg Gln
 165 170 175

Pro Pro Glu Ala Leu Ala Phe Lys Trp Pro Phe Leu Gly Pro Arg Gln
 180 185 190

Cys Ile Ala Ser Glu Thr Asp Ser Leu Pro Met Ile Val Ser Ile Lys
 195 200 205

Glu Gly Gly Arg Thr Arg Pro Gln Val Val Ser Leu Pro Asn Met Arg
 210 215 220

Val Gln Lys Cys Ser Cys Ala Ser Asp Gly Ala Leu Val Pro Arg Arg
 225 230 235 240

Leu Gln Pro

<210> 209

<211> 204

<212> PRT

<213> Homo sapien

281

<400> 209

Met Glu Arg Leu Thr Leu Pro Leu Gly Gly Ala Ala Ala Val Asp Glu
 1 5 10 15

Tyr Leu Glu Tyr Arg Arg Tyr Lys Gln His Lys Thr Asp Leu Glu Ala
 20 25 30

Ile Pro Gln Gln Cys Pro Ile Asp Leu Pro Cys Gln Val Thr Gly Cys
 35 40 45

Gln Cys Arg Ala Tyr Leu Tyr Val Pro Leu Asn Gly Ser Gln Pro Ile
 50 55 60

Arg Cys Arg Cys Lys His Phe Ala Asp Gln His Ser Ala Ala Pro Gly
 65 70 75 80

Phe Thr Cys Asn Thr Cys Ser Lys Cys Ser Gly Phe His Ser Cys Phe
 85 90 95

Thr Cys Ala Cys Gly Gln Pro Ala Tyr Ala His Asp Thr Val Val Glu
 100 105 110

Thr Lys Gln Glu Arg Leu Ala Gln Glu Lys Pro Val Gly Gln Asp Ile
 115 120 125

Pro Tyr Ala Ala Met Gly Gly Leu Thr Gly Phe Ser Ser Leu Ala Glu
 130 135 140

Gly Tyr Met Arg Leu Asp Asp Ser Gly Ile Val Gly Thr Ser Ser Gln
 145 150 155 160

Val Ser Ser Leu Arg Arg Pro Glu Glu Asp Asp Met Ala Phe Phe Glu
 165 170 175

Arg Arg Tyr Gln Glu Arg Met Lys Met Glu Lys Ala Ala Lys Trp Lys
 180 185 190

Gly Lys Ala Pro Leu Pro Ser Ala Thr Lys Pro Ser
 195 200

<210> 210

<211> 80

<212> PRT

<213> Homo sapien

<400> 210

282

Glu Val Gln Glu Ala Ile Phe Phe Arg Val Cys Gly Ala Arg Ser Val
 1 5 10 15

Val Leu Leu Leu Val Ala Val Arg Leu His Thr Leu Leu Ser Cys Pro
 20 25 30

Leu Glu Gln Pro Ala Gly Thr Glu Trp Ile Leu Glu Glu Gly Val Thr
 35 40 45

Thr Gly Pro Pro Arg Lys Pro Arg Ala Asp Ile Tyr Asn Leu Arg Ser
 50 55 60

Pro Asp Glu Phe Ile Val Gly Gln Asn Gln Ala Leu Ile Glu Pro Gly
 65 70 75 80

<210> 211
 <211> 84
 <212> PRT
 <213> Homo sapien

<400> 211

Glu Gln Gln Pro Ser Pro Ile Asp Ser Thr Glu Thr Thr Arg Asn Gln
 1 5 10 15

Gln Val Arg Pro Thr Thr Ser Arg Asn Lys Arg Arg Ala Ala Ser Gln
 20 25 30

His Ile Ser Lys Ala Thr Arg Pro Thr Ala Lys Arg Gln Ala Ala Asp
 35 40 45

Ser Asp Ile Thr Thr Ser Gly Pro Thr Ala Thr Thr Thr Asp Asp Lys
 50 55 60

Asn Asp Val Cys Glu Asp Thr Pro His Arg Arg Thr Thr Gly Trp His
 65 70 75 80

Gln Arg Asp Leu

<210> 212
 <211> 56
 <212> PRT
 <213> Homo sapien

<400> 212

Pro Leu Trp Arg Arg Leu Leu Leu Gly Ser Arg Leu Leu Leu Pro Cys
 1 5 10 15

283

Asn Arg Asn Trp Arg Trp Asn Met Arg Gly Ala Leu Trp Lys Glu Lys
 20 25 30

Asp Arg Pro Cys Ala Phe Met Lys Val Lys Ile Trp Leu Asn Gln Phe
 35 40 45

His Lys Val Thr Val Tyr Ile Ala
 50 55

<210> 213
 <211> 451
 <212> PRT
 <213> Homo sapien

<400> 213

Met Phe Leu Leu Leu Leu His Leu Gln Ile Lys Trp Arg Ala Thr Ile
 1 5 10 15

Asn Leu Leu Ser Val Thr Glu Asp Gly Leu His Phe Val Glu Tyr Tyr
 20 25 30

Leu Asn Arg Ile Ile His Leu Asp Val Asp Ser Glu Ala Lys Lys Leu
 35 40 45

Leu Gly Leu Gly Gln Lys His Leu Val Met Gly Asp Ile Pro Ala Ala
 50 55 60

Val Asn Ala Phe Gln Glu Ala Ala Ser Leu Leu Gly Lys Lys Tyr Gly
 65 70 75 80

Glu Thr Ala Asn Glu Cys Gly Glu Ala Phe Phe Phe Tyr Gly Lys Ser
 85 90 95

Leu Leu Glu Leu Ala Arg Met Glu Asn Gly Val Leu Gly Asn Ala Leu
 100 105 110

Glu Gly Val His Val Glu Glu Glu Glu Gly Glu Lys Thr Glu Asp Glu
 115 120 125

Ser Leu Val Glu Asn Asn Asp Asn Ile Asp Glu Thr Glu Gly Ser Glu
 130 135 140

Glu Asp Asp Lys Glu Asn Asp Lys Thr Glu Glu Met Pro Asn Asp Ser
 145 150 155 160

284

Val Leu Glu Asn Lys Ser Leu Gln Glu Asn Glu Glu Glu Glu Ile Gly
 165 170 175

Asn Leu Glu Leu Ala Trp Asp Met Leu Asp Leu Ala Lys Ile Ile Phe
 180 185 190

Lys Arg Gln Glu Thr Lys Glu Ala Gln Leu Tyr Ala Ala Gln Ala His
 195 200 205

Leu Lys Leu Gly Glu Val Ser Val Glu Ser Glu Asn Tyr Val Gln Ala
 210 215 220

Val Glu Glu Phe Gln Ser Cys Leu Asn Leu Gln Glu Gln Tyr Leu Glu
 235 230 235 240

Ala His Asp Arg Leu Leu Ala Glu Thr His Tyr Gln Leu Gly Leu Ala
 245 250 255

Tyr Gly Tyr Asn Ser Gln Tyr Asp Glu Ala Val Ala Gln Phe Ser Lys
 260 265 270

Ser Ile Glu Val Ile Glu Asn Arg Met Ala Val Leu Asn Glu Gln Val
 275 280 285

Lys Glu Ala Glu Gly Ser Ser Ala Glu Tyr Lys Lys Glu Ile Glu Glu
 290 295 300

Leu Lys Glu Leu Leu Pro Glu Ile Arg Glu Lys Ile Glu Asp Ala Lys
 305 310 315 320

Glu Ser Gln Arg Ser Gly Asn Val Ala Glu Leu Ala Leu Lys Ala Thr
 325 330 335

Leu Val Glu Ser Ser Thr Ser Gly Phe Thr Pro Gly Gly Gly Gly Ser
 340 345 350

Ser Val Ser Met Ile Ala Ser Arg Lys Pro Thr Asp Gly Ala Ser Ser
 355 360 365

Ser Asn Cys Val Thr Asp Ile Ser His Leu Val Arg Lys Lys Arg Lys
 370 375 380

Pro Glu Glu Glu Ser Pro Arg Lys Asp Asp Ala Lys Lys Ala Lys Gln
 385 390 395 400

Glu Pro Glu Val Asn Gly Gly Ser Gly Asp Ala Val Pro Ser Gly Asn

285

405

410

415

Glu Val Ser Glu Asn Met Glu Glu Glu Ala Glu Asn Gln Ala Glu Ser
 420 425 430

Arg Ala Ala Val Glu Gly Thr Val Glu Ala Gly Ala Thr Val Glu Ser
 435 440 445

Thr Ala Cys
 450

<210> 214

<211> 337

<212> PRT

<213> Homo sapien

<400> 214

Met Ala His Ala Pro Ala Arg Cys Pro Ser Ala Arg Gly Ser Gly Asp
 1 5 10 15

Gly Glu Met Gly Lys Pro Arg Asn Val Ala Leu Ile Thr Gly Ile Thr
 20 25 30

Gly Gln Asp Gly Ser Tyr Leu Ala Glu Phe Leu Leu Glu Lys Gly Tyr
 35 40 45

Glu Val His Gly Ile Val Arg Arg Ser Ser Ser Phe Asn Thr Gly Arg
 50 55 60

Ile Glu His Leu Tyr Lys Asn Pro Gln Ala His Ile Glu Gly Asn Met
 65 70 75 80

Lys Leu His Tyr Gly Asp Leu Thr Asp Ser Thr Cys Leu Val Lys Ile
 85 90 95

Ile Asn Glu Val Lys Pro Thr Glu Ile Tyr Asn Leu Gly Ala Gln Ser
 100 105 110

His Val Lys Ile Ser Phe Asp Leu Ala Glu Tyr Thr Ala Asp Val Asp
 115 120 125

Gly Val Gly Thr Leu Arg Leu Leu Asp Ala Val Lys Thr Cys Gly Leu
 130 135 140

Ile Asn Ser Val Lys Phe Tyr Gln Ala Ser Thr Ser Glu Leu Tyr Gly
 145 150 155 160

286

Lys Val Gln Glu Ile Pro Gln Lys Glu Thr Thr Pro Phe Tyr Pro Arg
 165 170 175

Ser Pro Tyr Gly Ala Asn Phe Val Thr Arg Lys Ile Ser Arg Ser Val
 180 185 190

Ala Lys Ile Tyr Leu Gly Gln Leu Glu Cys Phe Ser Leu Gly Asn Leu
 195 200 205

Asp Ala Lys Arg Asp Trp Gly His Ala Lys Asp Tyr Val Glu Ala Met
 210 215 220

Trp Leu Met Leu Gln Asn Asp Glu Pro Glu Asp Phe Val Ile Ala Thr
 225 230 235 240

Gly Glu Val His Ser Val Arg Glu Phe Val Glu Lys Ser Phe Leu His
 245 250 255

Ile Gly Lys Thr Ile Val Trp Glu Gly Lys Asn Glu Asn Glu Val Gly
 260 265 270

Arg Cys Lys Glu Thr Gly Lys Val His Val Thr Val Asp Leu Lys Tyr
 275 280 285

Tyr Arg Pro Thr Glu Val Asp Phe Leu Gln Gly Asp Cys Thr Lys Ala
 290 295 300

Lys Gln Lys Leu Asn Trp Lys Pro Arg Val Ala Phe Asp Glu Leu Val
 305 310 315 320

Arg Glu Met Val His Ala Asp Val Glu Leu Met Arg Thr Asn Pro Asn
 325 330 335

Ala

<210> 215

<211> 332

<212> PRT

<213> Homo sapien

<400> 215

Met Ala His Ala Pro Ala Arg Cys Pro Ser Ala Arg Gly Ser Gly Asp
 1 5 10 15

Gly Glu Met Gly Lys Pro Arg Asn Val Ala Leu Ile Thr Gly Ile Thr

287

20

25

30

Gly Gln Asp Gly Ser Tyr Leu Ala Glu Phe Leu Leu Glu Lys Gly Tyr
 35 40 45

Glu Val His Gly Ile Val Arg Arg Ser Ser Ser Phe Asn Thr Gly Arg
 50 55 60

Ile Glu His Leu Tyr Lys Asn Pro Gln Ala His Ile Glu Gly Asn Met
 65 70 75 80

Lys Leu His Tyr Gly Asp Leu Thr Asp Ser Thr Cys Leu Val Lys Ile
 85 90 95

Ile Asn Glu Val Lys Pro Thr Glu Ile Tyr Asn Leu Gly Ala Gln Ser
 100 105 110

His Val Lys Ile Ser Phe Asp Leu Ala Glu Tyr Thr Ala Asp Val Asp
 115 120 125

Gly Val Gly Thr Leu Arg Leu Leu Asp Ala Val Lys Thr Cys Gly Leu
 130 135 140

Ile Asn Ser Val Lys Phe Tyr Gln Ala Ser Thr Ser Glu Leu Tyr Gly
 145 150 155 160

Lys Val Gln Glu Ile Pro Gln Lys Glu Thr Thr Pro Phe Tyr Pro Arg
 165 170 175

Ser Pro Tyr Gly Ala Ala Lys Leu Tyr Ala Tyr Trp Ile Val Val Asn
 180 185 190

Phe Arg Glu Ala Tyr Asn Leu Phe Ala Val Asn Gly Ile Leu Phe Asn
 195 200 205

His Glu Ser Pro Arg Arg Gly Ala Asn Phe Val Thr Arg Lys Ile Ser
 210 215 220

Arg Ser Val Ala Lys Ile Tyr Leu Gly Gln Leu Glu Cys Phe Ser Leu
 225 230 235 240

Gly Asn Leu Asp Ala Lys Arg Asp Trp Gly His Ala Lys Asp Tyr Val
 245 250 255

Glu Ala Met Trp Leu Met Leu Gln Asn Asp Glu Pro Glu Asp Phe Val
 260 265 270

288

Ile Ala Thr Gly Glu Val His Ser Val Arg Glu Phe Val Glu Lys Ser
 275 280 285

Phe Leu His Ile Gly Lys Thr Ile Val Trp Glu Gly Lys Asn Glu Asn
 290 295 300

Glu Val Gly Arg Cys Lys Glu Thr Gly Lys Val His Val Thr Val Asp
 305 310 315 320

Leu Lys Tyr Tyr Arg Pro Thr Glu Val Glu Thr Asn
 325 330

<210> 216

<211> 382

<212> PRT

<213> Homo sapien

<400> 216

Met Ala His Ala Pro Ala Arg Cys Pro Ser Ala Arg Gly Ser Gly Asp
 1 5 10 15

Gly Glu Met Gly Lys Pro Arg Asn Val Ala Leu Ile Thr Gly Ile Thr
 20 25 30

Gly Gln Asp Gly Ser Tyr Leu Ala Glu Phe Leu Leu Glu Lys Gly Tyr
 35 40 45

Glu Val His Gly Ile Val Arg Arg Ser Ser Ser Phe Asn Thr Gly Arg
 50 55 60

Ile Glu His Leu Tyr Lys Asn Pro Gln Ala His Ile Glu Gly Asn Met
 65 70 75 80

Lys Leu His Tyr Gly Asp Leu Thr Asp Ser Thr Cys Leu Val Lys Ile
 85 90 95

Ile Asn Glu Val Lys Pro Thr Glu Ile Tyr Asn Leu Gly Ala Gln Ser
 100 105 110

His Val Lys Ile Ser Phe Asp Leu Ala Glu Tyr Thr Ala Asp Val Asp
 115 120 125

Gly Val Gly Thr Leu Arg Leu Leu Asp Ala Val Lys Thr Cys Gly Leu
 130 135 140

289

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Ile Asn Ser Val Lys Phe Tyr Gln Ala Ser Thr Ser Glu Leu Tyr Gly
145                      150                      155                      160

Lys Val Gln Glu Ile Pro Gln Lys Glu Thr Thr Pro Phe Tyr Pro Arg
                      165                      170                      175

Ser Pro Tyr Gly Ala Ala Lys Leu Tyr Ala Tyr Trp Ile Val Val Asn
                      180                      185                      190

Phe Arg Glu Ala Tyr Asn Leu Phe Ala Val Asn Gly Ile Leu Phe Asn
                      195                      200                      205

His Glu Ser Pro Arg Arg Gly Ala Asn Phe Val Thr Arg Lys Ile Ser
                      210                      215                      220

Arg Ser Val Ala Lys Ile Tyr Leu Gly Gln Leu Glu Cys Phe Ser Leu
225                      230                      235                      240

Gly Asn Leu Asp Ala Lys Arg Asp Trp Gly His Ala Lys Asp Tyr Val
                      245                      250                      255

Glu Ala Met Trp Leu Met Leu Gln Asn Asp Glu Pro Glu Asp Phe Val
                      260                      265                      270

Ile Ala Thr Gly Glu Val His Ser Val Arg Glu Phe Val Glu Lys Ser
                      275                      280                      285

Phe Leu His Ile Gly Lys Thr Ile Val Trp Glu Gly Lys Asn Glu Asn
290                      295                      300

Glu Val Gly Arg Cys Lys Glu Thr Gly Lys Val His Val Thr Val Asp
305                      310                      315                      320

Leu Lys Tyr Tyr Arg Pro Thr Glu Val Val Arg Thr Leu Trp Pro Pro
                      325                      330                      335

Ser Ala Trp Pro Arg Leu Ala Gly Trp Leu Gly Lys Cys Ala His Gly
                      340                      345                      350

Met Pro Gly Ala Ser Leu Trp Ser Cys Gln Phe Ser Ser Leu Ala Ser
                      355                      360                      365

Phe Ser Val His Phe Gln Asn Gln Asn Thr Val Asn Ser Ile
370                      375                      380

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<210> 217

290

<211> 258

<212> PRT

<213> Homo sapien

<400> 217

Met Asn Ser Asn Val Glu Asn Leu Pro Pro His Ile Ile Arg Leu Val
 1 5 10 15

Tyr Lys Glu Val Thr Thr Leu Thr Ala Asp Pro Pro Asp Gly Ile Lys
 20 25 30

Val Phe Pro Asn Glu Glu Asp Leu Thr Asp Leu Gln Val Thr Ile Glu
 35 40 45

Gly Pro Glu Gly Thr Pro Tyr Ala Gly Gly Leu Phe Arg Met Lys Leu
 50 55 60

Leu Leu Gly Lys Asp Phe Pro Ala Ser Pro Pro Lys Gly Tyr Phe Leu
 65 70 75 80

Thr Lys Ile Phe His Pro Asn Val Gly Ala Asn Gly Glu Ile Cys Val
 85 90 95

Asn Val Leu Lys Arg Asp Trp Thr Ala Glu Leu Gly Ile Arg His Val
 100 105 110

Leu Leu Thr Ile Lys Cys Leu Leu Ile His Pro Asn Pro Glu Ser Ala
 115 120 125

Leu Asn Glu Glu Ala Gly Arg Leu Leu Leu Glu Asn Tyr Glu Glu Tyr
 130 135 140

Ala Ala Arg Ala Arg Leu Leu Thr Glu Ile His Gly Gly Ala Gly Gly
 145 150 155 160

Pro Ser Gly Arg Ala Glu Ala Gly Arg Ala Leu Ala Ser Gly Thr Glu
 165 170 175

Ala Ser Ser Thr Asp Pro Gly Ala Pro Gly Arg Arg Ala Glu Val His
 180 185 190

Trp Pro Glu His Val Gly Arg Glu Arg Arg Trp Gly Arg Lys Thr Thr
 195 200 205

Asp Gly Ala Arg Val Lys Val Phe Leu Ser Arg Asp His Ser Ala Pro
 210 215 220

291

Asn Phe Ser Asn Cys Gly Pro Ser Gly Arg Arg Val Asn Ala Gln Thr
 225 230 235 240

Lys Lys Pro Ser Arg Lys Gly Val Leu Ser Ala Ala Phe Gln Ala Ser
 245 250 255

Leu Leu

<210> 218
 <211> 262
 <212> PRT
 <213> Homo sapien

<400> 218

Met Arg Ala Val Ile Lys Arg Gln Trp Cys Ala Arg Gly Arg Leu Ser
 1 5 10 15

Ala Ala Gly His Arg Gly Gly Gly Leu Val Tyr Ala Val Arg Gly Gly
 20 25 30

Arg Arg Arg Gln Arg Gly Ala Glu Arg Gly Arg Arg Gly Leu Ser Arg
 35 40 45

Ala Ala Ala Ala Ala Val Gly Pro Pro Ala Pro Ala Gly Gly Pro Lys
 50 55 60

Asn Leu Pro Pro His Ile Ile Arg Leu Val Tyr Lys Glu Val Thr Thr
 65 70 75 80

Leu Thr Ala Asp Pro Pro Asp Gly Ile Lys Val Phe Pro Asn Glu Glu
 85 90 95

Asp Leu Thr Asp Leu Gln Val Thr Ile Glu Gly Pro Glu Gly Thr Pro
 100 105 110

Tyr Ala Gly Gly Leu Phe Arg Met Lys Leu Leu Leu Gly Lys Asp Phe
 115 120 125

Pro Ala Ser Pro Pro Lys Gly Tyr Phe Leu Thr Lys Ile Phe His Pro
 130 135 140

Asn Val Gly Ala Asn Gly Glu Ile Cys Val Asn Val Leu Lys Arg Asp
 145 150 155 160

Trp Thr Ala Glu Leu Gly Ile Arg His Val Leu Leu Thr Ile Lys Cys

292

165

170

175

Leu Leu Ile His Pro Asn Pro Glu Ser Ala Leu Asn Glu Glu Ala Gly
 180 185 190

Arg Leu Leu Leu Glu Asn Tyr Glu Glu Tyr Ala Ala Arg Ala Arg Leu
 195 200 205

Leu Thr Glu Ile His Gly Gly Ala Gly Gly Pro Ser Gly Arg Ala Glu
 210 215 220

Ala Gly Arg Ala Leu Ala Ser Gly Thr Glu Ala Ser Ser Thr Asp Pro
 225 230 235 240

Gly Ala Pro Gly Gly Pro Gly Gly Ala Glu Gly Ser His Gly Gln Glu
 245 250 255

Ala Cys Trp Arg Ala Arg
 260

<210> 219

<211> 291

<212> PRT

<213> Homo sapien

<400> 219

Gly Ser Glu Leu Arg Gly Arg Gly Gly Arg Gly Leu Arg Ala Val Ile
 1 5 10 15

Lys Arg Gln Trp Cys Ala Arg Gly Arg Leu Ser Ala Ala Gly His Arg
 20 25 30

Gly Gly Gly Leu Val Tyr Ala Val Arg Gly Gly Arg Arg Arg Gln Arg
 35 40 45

Gly Ala Glu Arg Gly Arg Arg Gly Leu Ser Arg Ala Ala Ala Ala Ala
 50 55 60

Val Gly Pro Pro Ala Pro Ala Gly Gly Pro Lys Asn Leu Pro Pro His
 65 70 75 80

Ile Ile Arg Leu Val Tyr Lys Glu Val Thr Thr Leu Thr Ala Asp Pro
 85 90 95

Pro Asp Gly Ile Lys Val Phe Pro Asn Glu Glu Asp Leu Thr Asp Leu
 100 105 110

293

Gln Val Thr Ile Glu Gly Pro Glu Gly Thr Pro Tyr Ala Gly Gly Leu
 115 120 125

Phe Arg Met Lys Leu Leu Leu Gly Lys Asp Phe Pro Ala Ser Pro Pro
 130 135 140

Lys Gly Tyr Phe Leu Thr Lys Ile Phe His Pro Asn Val Gly Ala Asn
 145 150 155 160

Gly Glu Ile Cys Val Asn Val Leu Lys Arg Asp Trp Thr Ala Glu Leu
 165 170 175

Gly Ile Arg His Val Leu Leu Thr Ile Lys Cys Leu Leu Ile His Pro
 180 185 190

Asn Pro Glu Ser Ala Leu Asn Glu Glu Ala Gly Arg Leu Leu Leu Glu
 195 200 205

Asn Tyr Glu Glu Tyr Ala Ala Arg Ala Arg Leu Leu Thr Glu Ile His
 210 215 220

Gly Gly Ala Gly Gly Pro Ser Gly Arg Ala Glu Ala Gly Arg Ala Leu
 225 230 235 240

Ala Ser Gly Thr Glu Ala Ser Ser Thr Asp Pro Gly Ala Pro Gly Gly
 245 250 255

Pro Gly Gly Ala Glu Gly Pro Met Ala Lys Lys His Ala Gly Glu Arg
 260 265 270

Asp Lys Lys Leu Ala Ala Lys Lys Lys Thr Asp Lys Lys Arg Ala Leu
 275 280 285

Arg Arg Leu
 290

<210> 220
 <211> 233
 <212> PRT
 <213> Homo sapien

<400> 220

Met Asn Ser Asn Val Glu Asn Leu Pro Pro His Ile Ile Arg Leu Val
 1 5 10 15

Tyr Lys Glu Val Thr Thr Leu Thr Ala Asp Pro Pro Asp Gly Ile Lys

294

20

25

30

Val Phe Pro Asn Glu Glu Asp Leu Thr Asp Leu Gln Val Thr Ile Glu
 35 40 45

Gly Pro Glu Gly Thr Pro Tyr Ala Gly Gly Leu Phe Arg Met Lys Leu
 50 55 60

Leu Leu Gly Lys Asp Phe Pro Ala Ser Pro Pro Lys Gly Tyr Phe Leu
 65 70 75 80

Thr Lys Ile Phe His Pro Asn Val Gly Ala Asn Gly Glu Ile Cys Val
 85 90 95

Asn Val Leu Lys Arg Asp Trp Thr Ala Glu Leu Gly Ile Arg His Val
 100 105 110

Leu Leu Leu Ser Trp Lys Asp Lys Gln Cys Gln Thr Gln Asp Thr Gln
 115 120 125

Val Leu Leu Arg Ser Ala Gln Glu His Leu Thr Met Gln Arg Val Thr
 130 135 140

Ile Lys Cys Leu Leu Ile His Pro Asn Pro Glu Ser Ala Leu Asn Glu
 145 150 155 160

Glu Ala Gly Arg Leu Leu Leu Glu Asn Tyr Glu Glu Tyr Ala Ala Arg
 165 170 175

Ala Arg Leu Leu Thr Glu Ile His Gly Gly Ala Gly Gly Pro Ser Gly
 180 185 190

Arg Ala Glu Ala Gly Arg Ala Leu Ala Ser Gly Thr Glu Ala Ser Ser
 195 200 205

Thr Asp Pro Gly Ala Pro Gly Gly Pro Gly Gly Ala Glu Gly Ser His
 210 215 220

Gly Gln Glu Ala Cys Trp Arg Ala Arg
 225 230

<210> 221

<211> 390

<212> PRT

<213> Homo sapien

<400> 221

295

Glu Pro Ser Arg Pro Pro Arg Ala Pro Ile Gly Arg Pro Ala Thr Gln
 1 5 10 15
 Pro Ser Pro Pro Leu Pro Ser Leu Leu Thr Ile Val Cys Gly Glu Gly
 20 25 30
 Ser Glu Arg Val Glu Asn Gln Gly Thr Cys Ala Leu Thr Ser Arg Leu
 35 40 45
 Arg Leu Gly Ala Glu Gly Pro Arg Arg Ala Trp Pro Ala Gly Gly Tyr
 50 55 60
 Lys Glu Ala Val Val Arg Ala Arg Pro Ala Gln Cys Cys Arg Ala Pro
 65 70 75 80
 Gly Arg Arg Val Gly Leu Arg Cys Ala Arg Arg Thr Ser Glu Ala Ala
 85 90 95
 Gly Ser Gly Ala Gly Pro Pro Gly Pro Leu Gln Gly Arg Ser Gly Ser
 100 105 110
 Ser Trp Ala Pro Arg Pro Gly Arg Arg Thr Glu Glu Arg Arg Lys Gly
 115 120 125
 Ala Gly Gly Thr Arg Pro Arg Pro Ala Ala Ala Met Asn Ser Asn Val
 130 135 140
 Glu Asn Leu Pro Pro His Ile Ile Arg Leu Val Tyr Lys Glu Val Thr
 145 150 155 160
 Thr Leu Thr Ala Asp Pro Pro Asp Gly Ile Lys Val Phe Pro Asn Glu
 165 170 175
 Glu Asp Leu Thr Asp Leu Gln Val Thr Ile Glu Gly Pro Glu Gly Thr
 180 185 190
 Pro Tyr Ala Gly Gly Leu Phe Arg Met Lys Leu Leu Leu Gly Lys Asp
 195 200 205
 Phe Pro Ala Ser Pro Pro Lys Gly Tyr Phe Leu Thr Lys Ile Phe His
 210 215 220
 Pro Asn Val Gly Ala Asn Gly Glu Ile Cys Val Asn Val Leu Lys Arg
 225 230 235 240

296

Asp Trp Thr Ala Glu Leu Gly Ile Arg His Val Leu Leu Leu Ser Trp
 245 250 255

Lys Asp Lys Gln Cys Gln Thr Gln Asp Thr Gln Val Leu Leu Arg Ser
 260 265 270

Ala Gln Glu His Leu Thr Met Gln Arg Val Thr Ile Lys Cys Leu Leu
 275 280 285

Ile His Pro Asn Pro Glu Ser Ala Leu Asn Glu Glu Ala Gly Arg Leu
 290 295 300

Leu Leu Glu Asn Tyr Glu Glu Tyr Ala Ala Arg Ala Arg Leu Leu Thr
 305 310 315 320

Glu Ile His Gly Gly Ala Gly Gly Pro Ser Gly Arg Ala Glu Ala Gly
 325 330 335

Arg Ala Leu Ala Ser Gly Thr Glu Ala Ser Ser Thr Asp Pro Gly Ala
 340 345 350

Pro Gly Gly Pro Gly Gly Ala Glu Gly Pro Met Ala Lys Lys His Ala
 355 360 365

Gly Glu Arg Asp Lys Lys Leu Ala Ala Lys Lys Lys Thr Asp Lys Lys
 370 375 380

Arg Ala Leu Arg Arg Leu
 385 390

<210> 222

<211> 110

<212> PRT

<213> Homo sapien

<400> 222

Pro Gly Ala His Pro Ser Leu Asp Leu Thr Arg Cys Ser Leu Phe Leu
 1 5 10 15

Pro Lys Arg Ala Arg Ser Ala Ile Thr Lys Ile Ser Leu Val Leu Tyr
 20 25 30

Phe Leu Thr Arg Arg Arg Arg Thr Gly Trp Arg Cys Ser Pro Ala Ala
 35 40 45

Trp Arg Cys Gln Arg Ser Glu Gly Leu Gln Glu Gly Leu Lys Leu Pro
 50 55 60

297

Ala Gln Asn Leu Arg Met Glu Pro Ala Leu His Tyr Leu Arg Ser Gln
65 70 75 80

Gly Leu Gly Arg Trp Arg Lys Val Ile Ser Pro Ser Leu Lys Ser Tyr
85 90 95

Phe Leu Asn Val Ala Pro His Gln Ala Leu Tyr Leu Thr Ser
100 105 110

<210> 223
<211> 257
<212> PRT
<213> Homo sapien

<400> 223

Met Asp His Arg Ser Arg Leu Arg Gly Thr Gly Leu Asn Arg Ile Pro
1 5 10 15

Gly Thr Gln Ser Arg Ala Pro Arg Val Pro Leu Pro Phe His Val Gln
20 25 30

Gln Glu Ala Arg Glu Gly Glu Asp Trp Glu Arg Glu Pro Pro Arg Gln
35 40 45

Arg Pro Pro Ile Tyr Glu Pro Pro Glu Ser Glu Glu Leu Pro Asp Asn
50 55 60

Val Met Val Ser Lys Pro Ala Pro Tyr Trp Glu Gly Thr Ala Val Ile
65 70 75 80

Asp Gly Glu Phe Lys Glu Leu Lys Leu Thr Asp Tyr Arg Gly Lys Tyr
85 90 95

Leu Val Phe Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr
100 105 110

Glu Ile Ile Ala Phe Gly Asp Arg Leu Glu Glu Phe Arg Ser Ile Asn
115 120 125

Thr Glu Val Val Ala Cys Ser Val Asp Ser Gln Phe Thr His Leu Ala
130 135 140

Trp Ile Asn Thr Pro Arg Arg Gln Gly Gly Leu Gly Pro Ile Arg Ile
145 150 155 160

298

Pro Leu Leu Ser Asp Leu Thr His Gln Ile Ser Lys Asp Tyr Gly Val
 165 170 175

Tyr Leu Glu Asp Ser Gly His Thr Leu Arg Gly Leu Phe Ile Ile Asp
 180 185 190

Asp Lys Gly Ile Leu Arg Gln Ile Thr Leu Asn Asp Leu Pro Val Gly
 195 200 205

Arg Ser Val Asp Glu Thr Leu Arg Leu Val Gln Ala Phe Gln Tyr Thr
 210 215 220

Asp Lys His Gly Glu Val Cys Pro Ala Gly Trp Lys Pro Gly Ser Glu
 225 230 235 240

Thr Ile Ile Pro Asp Pro Ala Gly Lys Leu Lys Tyr Phe Asp Lys Leu
 245 250 255

Asn

<210> 224

<211> 105

<212> PRT

<213> Homo sapien

<400> 224

Met Gln Lys Lys Lys Asn Ser Asn Ser Asn Ser Gly Thr Ser Ser Phe
 1 5 10 15

Gly Lys Arg Arg Asn Lys Thr His Thr Leu Cys Arg Arg Cys Gly Ser
 20 25 30

Lys Ala Tyr His Leu Gln Lys Ser Thr Cys Gly Lys Cys Gly Tyr Pro
 35 40 45

Ala Lys Arg Lys Arg Lys Tyr Asn Trp Ser Ala Lys Ala Lys Arg Arg
 50 55 60

Asn Thr Thr Gly Thr Gly Arg Met Arg His Leu Lys Ile Val Tyr Arg
 65 70 75 80

Arg Phe Arg His Gly Phe Arg Glu Gly Thr Thr Pro Lys Pro Lys Arg
 85 90 95

Ala Ala Val Ala Ala Ser Ser Ser Ser
 100 105

299

<210> 225
 <211> 111
 <212> PRT
 <213> Homo sapien

<400> 225

Ile Phe Met Val Gly Val Asp Ala Lys Lys Lys Glu Phe Glu Phe Glu
 1 5 10 15

Phe Gly Thr Ser Ser Phe Gly Lys Arg Arg Asn Lys Thr His Thr Leu
 20 25 30

Cys Arg Arg Cys Gly Ser Lys Ala Tyr His Leu Gln Lys Ser Thr Cys
 35 40 45

Gly Lys Cys Gly Tyr Pro Ala Lys Arg Lys Arg Lys Tyr Asn Trp Ser
 50 55 60

Ala Lys Ala Lys Arg Arg Asn Thr Thr Gly Thr Gly Arg Met Arg His
 65 70 75 80

Leu Lys Ile Val Tyr Arg Arg Phe Arg His Gly Phe Arg Glu Gly Thr
 85 90 95

Thr Pro Lys Pro Lys Arg Ala Ala Val Ala Ala Ser Ser Ser Ser
 100 105 110

<210> 226
 <211> 104
 <212> PRT
 <213> Homo sapien

<220>
 <221> MISC_FEATURE
 <222> (3)..(5)
 <223> X=any amino acid

<400> 226

Met Ser Xaa Xaa Xaa Arg Ile Arg Pro Arg Gly Thr Ser Ser Phe Gly
 1 5 10 15

Lys Arg Arg Asn Lys Thr His Thr Leu Cys Arg Arg Cys Gly Ser Lys
 20 25 30

Ala Tyr His Leu Gln Lys Ser Thr Cys Gly Lys Cys Gly Tyr Pro Ala
 35 40 45

300

Lys Arg Lys Arg Lys Tyr Asn Trp Ser Ala Lys Ala Lys Arg Arg Asn
 50 55 60

Thr Thr Gly Thr Gly Arg Met Arg His Leu Lys Ile Val Tyr Arg Arg
 65 70 75 80

Phe Arg His Gly Phe Arg Glu Gly Thr Thr Pro Lys Pro Lys Arg Ala
 85 90 95

Ala Val Ala Ala Ser Ser Ser Ser
 100

<210> 227
 <211> 129
 <212> PRT
 <213> Homo sapien

<220>
 <221> MISC_FEATURE
 <222> (12)..(12)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (25)..(25)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (62)..(62)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (64)..(64)
 <223> X=any amino acid

<400> 227

Gln Ser His Lys Thr Leu Val Leu Gln Thr Thr Xaa Arg Ser Leu Leu
 1 5 10 15

Ala His Thr Thr Cys Arg Phe Trp Xaa Phe Pro Asn Leu Leu Gly Ile
 20 25 30

Lys Val Asn Asn Ser Ile Thr Arg Gly Ser Gly Gln Pro Ser Phe Val
 35 40 45

Arg Gly Cys Ile Val Gly Lys Pro Thr Ser Val Cys Gln Xaa Leu Xaa

301

50

55

60

Glu Phe Gly Arg Gly Glu Arg His Arg Leu Glu Ser Val Ala Ile Arg
 65 70 75 80

Arg Thr Arg Cys Ala Ala Ala Val Ala Leu Arg Pro Thr Thr Phe Arg
 85 90 95

Ser Arg Pro Val Ala Asn Val Ala Thr Leu Pro Ser Ala Arg Glu Ser
 100 105 110

Ile Thr Gly Val Pro Arg Leu Lys Asp Glu Ile Pro Pro Glu Leu Val
 115 120 125

Glu

<210> 228

<211> 96

<212> PRT

<213> Homo sapien

<400> 228

Ala Cys Arg Ala Ala Gln Cys Asp Gly Ser Trp Ser Arg Pro Arg Ser
 1 5 10 15

Leu Cys Arg Arg Cys Gly Ser Lys Ala Tyr His Leu Gln Lys Ser Thr
 20 25 30

Cys Gly Lys Cys Gly Tyr Pro Ala Lys Arg Lys Arg Lys Tyr Asn Trp
 35 40 45

Ser Ala Lys Ala Lys Arg Arg Asn Thr Thr Gly Thr Gly Arg Met Arg
 50 55 60

His Leu Lys Ile Val Tyr Arg Arg Phe Arg His Gly Phe Arg Glu Gly
 65 70 75 80

Thr Thr Pro Lys Pro Lys Arg Ala Ala Val Ala Ala Ser Ser Ser Ser
 85 90 95

<210> 229

<211> 55

<212> PRT

<213> Homo sapien

<400> 229

302

Met His Ala Glu Arg Arg Ser Val Met Asp Arg Gly Arg Gly Arg Gly
 1 5 10 15

Arg Pro Thr Thr Phe Arg Ser Arg Pro Val Ala Asn Val Ala Thr Leu
 20 25 30

Pro Ser Ala Arg Glu Ser Ile Thr Gly Val Pro Arg Leu Lys Asp Glu
 35 40 45

Ile Pro Pro Glu Leu Val Glu
 50 55

<210> 230
 <211> 72
 <212> PRT
 <213> Homo sapien

<400> 230

Ala Tyr His Leu Gln Lys Ser Thr Cys Gly Lys Cys Gly Tyr Pro Ala
 1 5 10 15

Lys Arg Lys Arg Lys Tyr Asn Trp Ser Ala Lys Ala Lys Arg Arg Asn
 20 25 30

Thr Thr Gly Thr Gly Arg Met Arg His Leu Lys Ile Val Tyr Arg Arg
 35 40 45

Phe Arg His Gly Phe Arg Glu Gly Thr Thr Pro Lys Pro Lys Arg Ala
 50 55 60

Ala Val Ala Ala Ser Ser Ser Ser
 65 70

<210> 231
 <211> 185
 <212> PRT
 <213> Homo sapien

<400> 231

Met Leu Glu Arg Arg Ser Val Asp Gly Cys Ala Arg Ala Gly Gly Arg
 1 5 10 15

Ala Gly Gly Ala Ile Met Gly Val Asp Ile Arg His Asn Lys Asp Arg
 20 25 30

Lys Val Arg Arg Lys Glu Pro Lys Ser Gln Asp Ile Tyr Leu Arg Leu
 35 40 45

303

Leu Val Lys Leu Tyr Arg Phe Leu Ala Arg Arg Thr Asn Ser Thr Phe
 50 55 60

Asn Gln Val Val Leu Lys Arg Leu Phe Met Ser Arg Thr Asn Arg Pro
 65 70 75 80

Pro Leu Ser Leu Ser Arg Met Ile Arg Lys Met Lys Leu Pro Gly Arg
 85 90 95

Glu Asn Lys Thr Ala Val Val Val Gly Thr Ile Thr Asp Asp Val Arg
 100 105 110

Val Gln Glu Val Pro Lys Leu Lys Val Cys Ala Leu Arg Val Thr Ser
 115 120 125

Arg Ala Arg Ser Arg Ile Leu Arg Ala Gly Gly Lys Ile Leu Thr Phe
 130 135 140

Asp Gln Leu Ala Leu Asp Ser Pro Lys Gly Cys Gly Thr Val Leu Leu
 145 150 155 160

Ser Gly Pro Arg Lys Gly Arg Glu Val Tyr Arg His Phe Gly Lys Ala
 165 170 175

Pro Gly Thr Pro His Ser His Thr Lys
 180 185

<210> 232
 <211> 214
 <212> PRT
 <213> Homo sapien

<400> 232

Gly Leu Trp His Cys Pro Ala Leu Arg Ser Ser Gln Gly Pro Arg Gly
 1 5 10 15

Val Pro Ala Phe Arg Gln Gly Pro Arg Asn Pro Ala Gln Pro His Gln
 20 25 30

Val Ser Ile Arg Pro Pro Ala Leu Pro Ser Pro Gln Thr Gln Pro Ala
 35 40 45

Gly Pro Gly Leu Ala Thr Leu Gly Leu Leu Leu Leu Ser Leu Val Pro
 50 55 60

Ala Ser Pro Arg Pro Ser Gly Thr Leu Ser Cys Leu Ile Leu Pro Ala

304

65 70 75 80

Phe Pro Phe Asn Thr Ala Trp Ser Cys Val Phe Gln Gly Leu Ser Arg
85 90 95

His Leu Leu Gly Ser Met Gln Phe Thr Gly Leu Cys Gln Pro Arg Leu
100 105 110

Gly Pro Ser Arg Trp Trp Gly Arg Cys Phe His Ser Pro Ser Trp Leu
115 120 125

Leu Gly Phe Pro Leu Cys Gln Ala Phe Pro Ala Ala Leu Thr Leu Leu
130 135 140

Gly Leu Asn Val Thr Gly Leu Trp Cys Ser Cys Ala Thr Pro Gln Trp
145 150 155 160

Pro Pro Leu Arg Gly Pro Pro Ser His Ser Leu Leu Ser Pro Gln Thr
165 170 175

Leu Arg Pro Leu Gln Gly Pro Glu Val Arg Ala Cys Gln Arg Pro Thr
180 185 190

Gly Gln Pro Arg Leu Gln Lys Leu Thr Leu Asp Pro Thr Leu Leu Leu
195 200 205

Lys Arg Phe Leu Leu Thr
210

<210> 233
<211> 131
<212> PRT
<213> Homo sapien

<400> 233

Met Leu Glu Arg Arg Ser Val Asp Gly Cys Ala Arg Ala Gly Gly Arg
1 5 10 15

Ala Gly Gly Ala Ile Met Gly Val Asp Ile Arg His Asn Lys Asp Arg
20 25 30

Lys Val Arg Arg Lys Glu Pro Lys Ser Gln Asp Ile Tyr Leu Arg Leu
35 40 45

Leu Val Lys Leu Tyr Arg Phe Leu Ala Arg Arg Thr Asn Ser Thr Phe
50 55 60

305

Asn Gln Val Val Leu Lys Arg Leu Phe Met Ser Arg Thr Asn Arg Pro
65 70 75 80

Pro Leu Ser Leu Ser Arg Met Ile Arg Lys Met Lys Leu Pro Gly Arg
85 90 95

Glu Asn Lys Thr Ala Val Val Val Gly Thr Ile Thr Asp Asp Val Arg
100 105 110

Val Gln Glu Val Pro Lys Leu Ile Gly Arg Asp His Ala Lys Pro Asp
115 120 125

Ser Ser Thr
130

<210> 234
<211> 132
<212> PRT
<213> Homo sapien

<400> 234

Asp Ala Cys Ser Ser Gly Ala Gly Asp Gly Cys Ala Arg Ala Gly Gly
1 5 10 15

Arg Ala Gly Gly Ala Ile Met Gly Val Asp Ile Arg His Asn Lys Asp
20 25 30

Arg Lys Val Arg Arg Lys Glu Pro Lys Ser Gln Asp Ile Tyr Leu Arg
35 40 45

Leu Leu Val Lys Leu Tyr Arg Phe Leu Ala Arg Arg Thr Asn Ser Thr
50 55 60

Phe Asn Gln Val Val Leu Lys Arg Leu Phe Met Ser Arg Thr Asn Arg
65 70 75 80

Pro Pro Leu Ser Leu Ser Arg Met Ile Arg Lys Met Lys Leu Pro Gly
85 90 95

Arg Glu Asn Lys Thr Ala Val Val Val Gly Thr Ile Thr Asp Asp Val
100 105 110

Arg Val Gln Glu Val Pro Lys Leu Ile Gly Arg Asp His Ala Lys Pro
115 120 125

Asp Ser Ser Thr

306

130

<210> 235

<211> 195

<212> PRT

<213> Homo sapien

<400> 235

Met Asp Trp Ser Arg Arg Gly Gly Arg Ala Gly Gly Ala Ile Met Gly
 1 5 10 15

Val Asp Ile Arg His Asn Lys Asp Arg Lys Val Arg Arg Lys Glu Pro
 20 25 30

Lys Ser Gln Asp Ile Tyr Leu Arg Leu Leu Val Lys Leu Tyr Arg Phe
 35 40 45

Leu Ala Arg Arg Thr Asn Ser Thr Phe Asn Gln Val Val Leu Lys Arg
 50 55 60

Leu Phe Met Ser Arg Thr Asn Arg Pro Pro Leu Ser Leu Ser Arg Met
 65 70 75 80

Val Ser Gly Trp Ser Arg Glu His Gly Arg Pro Gly Ser Arg Trp Val
 85 90 95

Leu Ser Val Trp Lys Gly Gly Arg Thr Trp Ser Ser Gly Ser Asn Gln
 100 105 110

Gly Ile Lys Gly Leu Ser Gln Pro Val Ala Ser Val Glu Leu Gly Leu
 115 120 125

Leu Val Gly Thr Glu Cys Pro Trp Ala Val Gly Lys Ser Pro Gly Pro
 130 135 140

Pro Leu Leu Leu Phe Val Arg Trp Arg Cys Pro Gly Gly Phe Arg Arg
 145 150 155 160

Leu Pro Gln Val Ile Thr Glu Phe Tyr Val Lys Gly Ser Ala Glu Gly
 165 170 175

Gly Pro Ile Glu Gln Ser Ala Phe Phe Phe Leu Ser Gly Ala Phe Pro
 180 185 190

Ser Trp Thr
 195

307

<210> 236
 <211> 115
 <212> PRT
 <213> Homo sapien

<400> 236

Ser Ala Trp Thr Leu Thr Ser Asn Gly Arg Ser Phe Pro Gly Pro Phe
 1 5 10 15

Pro Lys Ser Trp Ala Cys Phe Leu Leu Pro Leu Ala Ile Leu Cys Pro
 20 25 30

Cys Gly Cys Ser Pro Thr Leu Arg Ala Val Pro Asp Leu Ser Cys Tyr
 35 40 45

Phe Pro Lys Pro Glu Thr Ala Pro Leu Gln Ile Leu Ala Ala Pro Phe
 50 55 60

Pro Cys Val Gln Tyr Arg Val Ile Thr Cys Pro Ser Leu Val Pro Leu
 65 70 75 80

Ile Leu Pro Cys Asp Tyr Ser Val Ile Pro Leu Pro Val Pro Glu Pro
 85 90 95

Pro Gly Leu Phe Leu Gly Ser Pro Glu Cys Ser Pro Arg Thr Gln Ser
 100 105 110

Ala Val Pro
 115

<210> 237
 <211> 156
 <212> PRT
 <213> Homo sapien

<400> 237

Gln Ser Leu Gly Arg Gly Leu Ala Thr Thr Arg Gly Arg Gly Ser Asp
 1 5 10 15

Gly Asn Gly Pro Thr Gly Asn Gly Asp His Pro Asn Phe Ser Leu Ser
 20 25 30

Glu Gly Arg Ala Phe Gly Ser Leu Ala Ala Gln Pro Ile Thr Ser Cys
 35 40 45

Leu Ser Val Pro Ala Pro Pro Phe Ser Leu Gly Lys Leu Gln Asp Gly
 50 55 60

308

Leu Leu His Ile Thr Thr Cys Ser Phe Val Ala Pro Trp Asn Ser Leu
65 70 75 80

Ser Leu Ala Gln Arg Arg Gly Phe Thr Lys Thr Tyr Thr Val Gly Cys
85 90 95

Glu Glu Cys Thr Val Phe Pro Cys Leu Ser Ile Pro Cys Lys Leu Gln
100 105 110

Ser Gly Thr His Cys Leu Trp Thr Asp Gln Leu Leu Gln Gly Ser Glu
115 120 125

Lys Gly Phe Gln Ser Arg His Leu Ala Cys Leu Pro Arg Glu Pro Gly
130 135 140

Leu Cys Thr Trp Gln Ser Leu Arg Ser Gln Ile Ala
145 150 155

<210> 238
<211> 226
<212> PRT
<213> Homo sapien

<400> 238

Met Ala Ala Ala Ala Ala Ala Ala Gly Ala Ala Gly Ser Ala Ala Pro
1 5 10 15

Ala Ala Ala Ala Gly Ala Pro Gly Ser Gly Gly Ala Pro Ser Gly Ser
20 25 30

Gln Gly Val Leu Ile Gly Asp Arg Leu Tyr Ser Gly Val Leu Ile Thr
35 40 45

Leu Glu Asn Cys Leu Leu Pro Asp Asp Lys Leu Arg Phe Thr Pro Ser
50 55 60

Met Ser Ser Gly Leu Asp Thr Asp Thr Glu Thr Asp Leu Arg Val Val
65 70 75 80

Gly Cys Glu Leu Ile Gln Ala Ala Gly Ile Leu Leu Arg Leu Pro Gln
85 90 95

Val Ala Met Ala Thr Gly Gln Val Leu Phe Gln Arg Phe Phe Tyr Thr
100 105 110

309

Lys Ser Phe Val Lys His Ser Met Glu His Val Ser Met Ala Cys Val
 115 120 125

His Leu Ala Ser Lys Ile Glu Glu Ala Pro Arg Arg Ile Arg Asp Val
 130 135 140

Ile Asn Val Phe His Arg Leu Arg Gln Leu Arg Asp Lys Lys Lys Pro
 145 150 155 160

Val Pro Leu Leu Leu Asp Gln Asp Tyr Val Asn Leu Lys Asn Gln Ile
 165 170 175

Ile Lys Ala Glu Arg Arg Val Leu Lys Glu Leu Gly Phe Cys Val His
 180 185 190

Val Lys His Pro His Lys Ile Ile Val Met Tyr Leu Gln Val Leu Glu
 195 200 205

Cys Glu Arg Asn Gln His Leu Val Gln Thr Ser Trp Val Ala Ser Glu
 210 215 220

Gly Lys
 225

<210> 239
 <211> 253
 <212> PRT
 <213> Homo sapien

<400> 239

Asp Ser Gln Asp Cys Leu Ala Leu Ser Pro Ser Asn Arg Leu Leu Arg
 1 5 10 15

Gly Val Val Arg Leu Ser Arg Phe Ser Leu Asp Asn Ala Gly Gly Arg
 20 25 30

Pro Gly Phe Pro Gly Gly Ala Leu Gln Phe Phe Leu Cys Leu Ala Ser
 35 40 45

Arg Asn Tyr Met Asn Asp Ser Leu Arg Thr Asp Val Phe Val Arg Phe
 50 55 60

Gln Pro Glu Ser Ile Ala Cys Ala Cys Ile Tyr Leu Ala Ala Arg Thr
 65 70 75 80

Leu Glu Ile Pro Leu Pro Asn Arg Pro His Trp Phe Leu Leu Phe Gly
 85 90 95

310

Ala Thr Glu Glu Glu Ile Gln Glu Ile Cys Leu Lys Ile Leu Gln Leu
 100 105 110

Tyr Ala Arg Lys Lys Val Asp Leu Thr His Leu Glu Gly Glu Val Glu
 115 120 125

Lys Arg Lys His Ala Ile Glu Glu Ala Lys Ala Gln Ala Arg Gly Leu
 130 135 140

Leu Pro Gly Gly Thr Gln Val Leu Asp Gly Thr Ser Gly Phe Ser Pro
 145 150 155 160

Ala Pro Lys Leu Val Glu Ser Pro Lys Glu Gly Lys Gly Ser Lys Pro
 165 170 175

Ser Pro Leu Ser Val Lys Asn Thr Lys Arg Arg Leu Glu Gly Ala Lys
 180 185 190

Lys Ala Lys Ala Asp Ser Pro Val Asn Gly Leu Pro Lys Gly Arg Glu
 195 200 205

Ser Arg Ser Arg Ser Arg Ser Arg Glu Gln Ser Tyr Ser Arg Ser Pro
 210 215 220

Ser Arg Ser Ala Ser Pro Lys Arg Arg Lys Ser Asp Ser Gly Ser Thr
 225 230 235 240

Ser Gly Gly Ser Lys Ser Gln Arg Ser Leu Gln Arg Leu
 245 250

<210> 240

<211> 346

<212> PRT

<213> Homo sapien

<400> 240

Asp Ser Gln Asp Cys Leu Ala Leu Ser Pro Ser Asn Arg Leu Leu Arg
 1 5 10 15

Gly Val Val Arg Leu Ser Arg Phe Ser Leu Asp Asn Ala Gly Gly Arg
 20 25 30

Pro Gly Phe Pro Gly Gly Ala Leu Gln Phe Phe Leu Cys Leu Ala Ser
 35 40 45

311

Arg Asn Tyr Met Asn Asp Ser Leu Arg Thr Asp Val Phe Val Arg Phe
 50 55 60

Gln Pro Glu Ser Ile Ala Cys Ala Cys Ile Tyr Leu Ala Ala Arg Thr
 65 70 75 80

Leu Glu Ile Pro Leu Pro Asn Arg Pro His Trp Phe Leu Leu Phe Gly
 85 90 95

Ala Thr Glu Glu Glu Ile Gln Glu Ile Cys Leu Lys Ile Leu Gln Leu
 100 105 110

Tyr Ala Arg Lys Lys Val Asp Leu Thr His Leu Glu Gly Glu Val Glu
 115 120 125

Lys Arg Lys His Ala Ile Glu Glu Ala Lys Ala Gln Ala Arg Gly Leu
 130 135 140

Leu Pro Gly Gly Thr Gln Val Leu Asp Gly Thr Ser Gly Phe Ser Pro
 145 150 155 160

Ala Pro Lys Leu Val Glu Ser Pro Lys Glu Gly Lys Gly Ser Lys Pro
 165 170 175

Ser Pro Leu Ser Val Lys Asn Thr Lys Arg Arg Leu Glu Gly Ala Lys
 180 185 190

Lys Ala Lys Ala Asp Ser Pro Val Asn Gly Leu Pro Lys Gly Arg Glu
 195 200 205

Ser Arg Ser Arg Ser Arg Ser Arg Glu Gln Ser Tyr Ser Arg Ser Pro
 210 215 220

Ser Arg Ser Ala Ser Pro Lys Arg Arg Lys Ser Asp Ser Gly Ser Thr
 225 230 235 240

Ser Gly Gly Ser Lys Ser Gln Ser Arg Ser Arg Ser Arg Ser Asp Ser
 245 250 255

Pro Pro Arg Gln Ala Pro Arg Ser Ala Pro Tyr Lys Gly Ser Glu Ile
 260 265 270

Arg Gly Ser Arg Lys Ser Lys Asp Cys Lys Tyr Pro Gln Lys Pro His
 275 280 285

Lys Ser Arg Ser Arg Ser Ser Ser Arg Ser Arg Ser Arg Glu

312

290

295

300

Arg Ala Asp Asn Pro Gly Lys Tyr Lys Lys Lys Ser His Tyr Tyr Arg
 305 310 315 320

Asp Gln Arg Arg Glu Arg Ser Arg Ser Tyr Glu Arg Thr Gly Arg Arg
 325 330 335

Tyr Glu Arg Asp His Pro Val Ala Ala Leu
 340 345

<210> 241
 <211> 91
 <212> PRT
 <213> Homo sapien

<400> 241

Pro Thr Thr Thr Lys Phe Ala Ala Ala Ser Thr Phe Leu Asn Trp Cys
 1 5 10 15

Cys Leu Gly Phe Ile Ala Phe Ala Tyr Ser Val Lys Ser Arg Asp Arg
 20 25 30

Lys Met Val Gly Asp Val Thr Gly Ala Gln Ala Tyr Ala Ser Thr Ala
 35 40 45

Lys Cys Leu Asn Ile Trp Ala Leu Ile Leu Gly Ile Phe Met Thr Ile
 50 55 60

Gly Phe Ile Leu Leu Leu Val Phe Gly Ser Val Thr Val Tyr His Ile
 65 70 75 80

Met Leu Gln Ile Ile Gln Glu Lys Arg Gly Tyr
 85 90

<210> 242
 <211> 92
 <212> PRT
 <213> Homo sapien

<400> 242

Gly Gln Glu Asp Gly Trp Arg Arg Asp Arg Gly Pro Gly Leu Cys Leu
 1 5 10 15

His Arg Gln Val Pro Glu His Leu Gly Pro Asp Phe Gly His Leu His
 20 25 30

313

Asp Arg Ile His Pro Val Thr Gly Ile Arg Leu Cys Asp Ser Leu Pro
 35 40 45

Tyr Tyr Val Thr Asp Asn Thr Gly Lys Thr Gly Leu Leu Val Ala Ala
 50 55 60

His Ser Leu Gln Pro Leu His Ser Thr Val Gln Cys Trp Pro Cys Thr
 65 70 75 80

Leu Gly Leu Leu Pro Leu Pro Pro Trp Ser Cys Pro
 85 90

<210> 243

<211> 137

<212> PRT

<213> Homo sapien

<400> 243

Met Leu Glu Arg Arg Ser Val Met Asp Arg Pro Pro Ala Glu Val Arg
 1 5 10 15

Glu Thr Lys Ile Lys Gly Lys Ser Gly Arg Phe Phe Thr Val Lys Leu
 20 25 30

Pro Val Ala Leu Asp Pro Gly Ala Lys Ile Ser Val Ile Val Glu Thr
 35 40 45

Val Tyr Thr His Val Leu His Pro Tyr Pro Thr Gln Ile Thr Gln Ser
 50 55 60

Glu Lys Gln Phe Val Val Phe Glu Gly Asn His Tyr Phe Tyr Ser Pro
 65 70 75 80

Tyr Pro Thr Lys Thr Gln Thr Met Arg Val Lys Leu Ala Ser Arg Asn
 85 90 95

Val Glu Ser Tyr Thr Lys Leu Gly Asn Pro Thr Arg Ser Glu Asp Leu
 100 105 110

Leu Asp Tyr Gly Pro Phe Arg Asp Val Pro Ala Tyr Ser Gln Asp Thr
 115 120 125

Phe Lys Val Pro Arg Pro Arg Pro Arg
 130 135

<210> 244

<211> 148

314

<212> PRT
 <213> Homo sapien

 <220>
 <221> MISC_FEATURE
 <222> (21)..(22)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (24)..(24)
 <223> X=any amino acid

<400> 244

Arg Leu Ile Tyr Arg Ala Ile Gly His Leu Ile Met Leu Glu Arg Arg
 1 5 10 15

Ser Val Met Asp Xaa Xaa Pro Xaa Glu Val Arg Glu Thr Lys Ile Lys
 20 25 30

Gly Lys Ser Gly Arg Phe Phe Thr Val Lys Leu Pro Val Ala Leu Asp
 35 40 45

Pro Gly Ala Lys Ile Ser Val Ile Val Glu Thr Val Tyr Thr His Val
 50 55 60

Leu His Pro Tyr Pro Thr Gln Ile Thr Gln Ser Glu Lys Gln Phe Val
 65 70 75 80

Val Phe Glu Gly Asn His Tyr Phe Tyr Ser Pro Tyr Pro Thr Lys Thr
 85 90 95

Gln Thr Met Arg Val Lys Leu Ala Ser Arg Asn Val Glu Ser Tyr Thr
 100 105 110

Lys Leu Gly Asn Pro Thr Arg Ser Glu Asp Leu Leu Asp Tyr Gly Pro
 115 120 125

Phe Arg Asp Val Pro Ala Tyr Ser Gln Asp Thr Phe Lys Val Pro Arg
 130 135 140

Pro Arg Pro Arg
 145

<210> 245
 <211> 479
 <212> PRT
 <213> Homo sapien

315

<400> 245

Met Glu Ala Pro Ala Ala Gly Leu Phe Leu Leu Leu Leu Leu Gly Thr
 1 5 10 15

Trp Ala Pro Ala Pro Gly Ser Ala Ser Ser Glu Ala Pro Pro Leu Ile
 20 25 30

Asn Glu Asp Val Lys Arg Thr Val Asp Leu Ser Ser His Leu Ala Lys
 35 40 45

Val Thr Ala Glu Val Val Leu Ala His Leu Gly Gly Gly Ser Thr Ser
 50 55 60

Arg Ala Thr Ser Phe Leu Leu Ala Leu Glu Pro Glu Leu Glu Ala Arg
 65 70 75 80

Leu Ala His Leu Gly Val Gln Val Lys Gly Glu Asp Glu Glu Glu Asn
 85 90 95

Asn Leu Glu Val Arg Glu Thr Lys Ile Lys Gly Lys Ser Gly Arg Phe
 100 105 110

Phe Thr Val Lys Leu Pro Val Ala Leu Asp Pro Gly Ala Lys Ile Ser
 115 120 125

Val Ile Val Glu Thr Val Tyr Thr His Val Leu His Pro Tyr Pro Thr
 130 135 140

Gln Ile Thr Gln Ser Glu Lys Gln Phe Val Val Phe Glu Gly Asn His
 145 150 155 160

Tyr Phe Tyr Ser Pro Tyr Pro Thr Lys Thr Gln Thr Met Arg Val Lys
 165 170 175

Leu Ala Ser Arg Asn Val Glu Ser Tyr Thr Lys Leu Gly Asn Pro Thr
 180 185 190

Arg Ser Glu Asp Leu Leu Asp Tyr Gly Pro Phe Arg Asp Val Pro Ala
 195 200 205

Tyr Ser Gln Asp Thr Phe Lys Val His Tyr Glu Asn Asn Ser Pro Phe
 210 215 220

Leu Thr Ile Thr Ser Met Thr Arg Val Ile Glu Val Ser His Trp Gly
 225 230 235 240

316

Asn Ile Ala Val Glu Glu Asn Val Asp Leu Lys His Thr Gly Ala Val
 245 250 255

Leu Lys Gly Pro Phe Ser Arg Tyr Asp Tyr Gln Arg Gln Pro Asp Ser
 260 265 270

Gly Ile Ser Ser Ile Arg Ser Phe Lys Thr Ile Leu Pro Ala Ala Ala
 275 280 285

Gln Asp Val Tyr Tyr Arg Asp Glu Ile Gly Asn Val Ser Thr Ser His
 290 295 300

Leu Leu Ile Leu Asp Asp Ser Val Glu Met Glu Ile Arg Pro Arg Phe
 305 310 315 320

Pro Leu Phe Gly Gly Trp Lys Thr His Tyr Ile Val Gly Tyr Asn Leu
 325 330 335

Pro Ser Tyr Glu Tyr Leu Tyr Asn Leu Gly Asp Gln Tyr Ala Leu Lys
 340 345 350

Met Arg Phe Val Asp His Val Phe Asp Glu Gln Val Ile Asp Ser Leu
 355 360 365

Thr Val Lys Ile Ile Leu Pro Glu Gly Ala Lys Asn Ile Glu Ile Asp
 370 375 380

Ser Pro Tyr Glu Ile Ser Arg Ala Pro Asp Glu Leu His Tyr Thr Tyr
 385 390 395 400

Leu Asp Thr Phe Gly Arg Pro Val Ile Val Ala Tyr Lys Lys Asn Leu
 405 410 415

Val Glu Gln His Ile Gln Asp Ile Val Leu Asp Ala Gln Val Lys Glu
 420 425 430

Leu Val Leu Lys Ser Ala Val Glu Ala Glu Arg Leu Val Ala Gly Lys
 435 440 445

Leu Lys Lys Asp Thr Tyr Ile Glu Asn Glu Lys Leu Ile Ser Gly Lys
 450 455 460

Arg Gln Glu Leu Val Thr Lys Ile Asp His Ile Leu Asp Ala Leu
 465 470 475

317

<210> 246

<211> 361

<212> PRT

<213> Homo sapien

<400> 246

Met Glu Ala Pro Ala Ala Gly Leu Phe Leu Leu Leu Leu Leu Gly Thr
 1 5 10 15

Trp Ala Pro Ala Pro Gly Ser Ala Ser Ser Glu Ala Pro Pro Leu Ile
 20 25 30

Asn Glu Asp Val Lys Arg Thr Val Asp Leu Ser Ser His Leu Ala Lys
 35 40 45

Val Thr Ala Glu Val Val Leu Ala His Leu Gly Gly Gly Ser Thr Ser
 50 55 60

Arg Ala Thr Ser Phe Leu Leu Ala Leu Glu Pro Glu Leu Glu Ala Arg
 65 70 75 80

Leu Ala His Leu Gly Val Gln Val Lys Gly Glu Asp Glu Glu Glu Asn
 85 90 95

Asn Leu Glu Val Arg Glu Thr Lys Ile Lys Gly Lys Ser Gly Arg Phe
 100 105 110

Phe Thr Val Lys Leu Pro Val Ala Leu Asp Pro Gly Ala Lys Ile Ser
 115 120 125

Val Ile Val Glu Thr Val Tyr Thr His Val Leu His Pro Tyr Pro Thr
 130 135 140

Gln Ile Thr Gln Ser Glu Lys Gln Phe Val Val Phe Glu Gly Asn His
 145 150 155 160

Tyr Phe Tyr Ser Pro Tyr Pro Thr Lys Thr Gln Thr Met Arg Val Lys
 165 170 175

Leu Ala Ser Arg Asn Val Glu Ser Tyr Thr Lys Leu Gly Asn Pro Thr
 180 185 190

Arg Ser Glu Asp Leu Leu Asp Tyr Gly Pro Phe Arg Asp Val Pro Ala
 195 200 205

Tyr Ser Gln Asp Thr Phe Lys Val His Tyr Glu Asn Asn Ser Pro Phe

318

210 215 220
 Leu Thr Ile Thr Ser Met Thr Arg Val Ile Glu Val Ser His Trp Gly
 225 230 235 240
 Asn Ile Ala Val Glu Glu Asn Val Asp Leu Lys His Thr Gly Ala Val
 245 250 255
 Leu Lys Gly Pro Phe Ser Arg Tyr Asp Tyr Gln Arg Gln Pro Asp Ser
 260 265 270
 Gly Ile Ser Ser Ile Arg Ser Phe Lys Thr Ile Leu Pro Ala Ala Ala
 275 280 285
 Gln Asp Val Tyr Tyr Arg Asp Glu Ile Gly Asn Val Ser Thr Ser His
 290 295 300
 Leu Leu Ile Leu Asp Asp Ser Val Glu Met Glu Ile Arg Pro Arg Phe
 305 310 315 320
 Pro Leu Phe Gly Gly Trp Lys Thr His Tyr Ile Val Gly Tyr Asn Leu
 325 330 335
 Pro Ser Tyr Glu Tyr Leu Tyr Asn Leu Gly Gln Ser Ser Ile Val Arg
 340 345 350
 Glu Lys Leu Thr Phe Ser Leu Ile Ser
 355 360
 <210> 247
 <211> 420
 <212> PRT
 <213> Homo sapien
 <400> 247
 Met Glu Ala Pro Ala Ala Gly Leu Phe Leu Leu Leu Leu Gly Thr
 1 5 10 15
 Trp Ala Pro Ala Pro Gly Ser Ala Ser Ser Glu Ala Pro Pro Leu Ile
 20 25 30
 Asn Glu Asp Val Lys Arg Thr Val Asp Leu Ser Ser His Leu Ala Lys
 35 40 45
 Val Thr Ala Glu Val Val Leu Ala His Leu Gly Gly Gly Ser Thr Ser
 50 55 60

319

Arg Ala Thr Ser Phe Leu Leu Ala Leu Glu Pro Glu Leu Glu Ala Arg
 65 70 75 80

Leu Ala His Leu Gly Val Gln Val Lys Gly Glu Asp Glu Glu Glu Asn
 85 90 95

Asn Leu Glu Val Arg Glu Thr Lys Ile Lys Gly Lys Ser Gly Arg Phe
 100 105 110

Phe Thr Val Lys Leu Pro Val Ala Leu Asp Pro Gly Ala Lys Ile Ser
 115 120 125

Val Ile Val Glu Thr Val Tyr Thr His Val Leu His Pro Tyr Pro Thr
 130 135 140

Gln Ile Thr Gln Ser Glu Lys Gln Phe Val Val Phe Glu Gly Asn His
 145 150 155 160

Tyr Phe Tyr Ser Pro Tyr Pro Thr Lys Thr Gln Thr Met Arg Val Lys
 165 170 175

Leu Ala Ser Arg Asn Val Glu Ser Tyr Thr Lys Leu Gly Asn Pro Thr
 180 185 190

Arg Ser Glu Asp Leu Leu Asp Tyr Gly Pro Phe Arg Asp Val Pro Ala
 195 200 205

Tyr Ser Gln Asp Thr Phe Lys Val His Tyr Glu Asn Asn Ser Pro Phe
 210 215 220

Leu Thr Ile Thr Ser Met Thr Arg Val Ile Glu Val Ser His Trp Gly
 225 230 235 240

Asn Ile Ala Val Glu Glu Asn Val Asp Leu Lys His Thr Gly Ala Val
 245 250 255

Leu Lys Gly Pro Phe Ser Arg Tyr Asp Tyr Gln Arg Gln Pro Asp Ser
 260 265 270

Gly Ile Ser Ser Ile Arg Ser Phe Lys Thr Ile Leu Pro Ala Ala Ala
 275 280 285

Gln Asp Val Tyr Tyr Arg Asp Glu Ile Gly Asn Val Ser Thr Ser His
 290 295 300

320

Leu Leu Ile Leu Asp Asp Ser Val Glu Met Glu Ile Arg Pro Arg Phe
 305 310 315 320

Pro Leu Phe Gly Gly Trp Lys Thr His Tyr Ile Val Gly Tyr Asn Leu
 325 330 335

Pro Ser Tyr Glu Tyr Leu Tyr Asn Leu Gly Asp Gln Tyr Ala Leu Lys
 340 345 350

Met Arg Phe Val Asp His Val Phe Asp Glu Gln Val Ile Asp Ser Leu
 355 360 365

Thr Val Lys Ile Ile Leu Pro Glu Gly Ala Lys Thr Thr Ser Trp Met
 370 375 380

Pro Cys Ser Pro Cys Pro His Pro Pro Gly Gly Pro Gly Cys Leu His
 385 390 395 400

Phe Ala Val Ala Gly Arg Leu Gly Gly Ser Gly Arg Leu Cys Met Glu
 405 410 415

Ala Ser Glu Ser
 420

<210> 248

<211> 128

<212> PRT

<213> Homo sapien

<400> 248

Gly Cys Ala Arg Glu Pro Glu Ser Arg Leu Pro Lys Leu Gly Ser Trp
 1 5 10 15

Glu Asn Leu Gly Pro Gly Leu Thr Glu Lys Arg Arg Gly Lys Glu Ala
 20 25 30

Gly Gln Glu Glu Gly Ala Trp Arg Thr Pro Ala Gly Gly Arg Gly Ala
 35 40 45

Ala Gly Leu Ser Val Thr Pro Leu Ser Pro Pro Arg Pro Ala Pro Pro
 50 55 60

Ala Gly Glu Gly Pro Arg Cys Pro Pro Gly Arg Pro Ala Pro Ala Arg
 65 70 75 80

Arg Arg Lys Gly Trp Arg Val Glu Arg Arg Gly Gly Arg Gly Ser Ala
 85 90 95

321

Trp Asp Ala Pro Gly His Arg Ala Arg Ser Leu Arg Pro Gly Ala Gly
 100 105 110

Gln Val Arg Gly Gln Asp Val Gly Arg Thr Trp Cys Met Ala Ala Ser
 115 120 125

<210> 249
 <211> 315
 <212> PRT
 <213> Homo sapien

<400> 249

Met Ser Ala Ala Gly Ala Gly Val Glu Ala Gly Phe Ser Ser
 1 5 10 15

Glu Glu Leu Leu Ser Leu Arg Phe Pro Leu His Arg Ala Cys Arg Asp
 20 25 30

Gly Asp Leu Ala Thr Leu Cys Ser Leu Leu Gln Gln Thr Pro His Ala
 35 40 45

His Leu Ala Ser Glu Asp Ser Phe Tyr Gly Trp Thr Pro Val His Trp
 50 55 60

Ala Ala His Phe Gly Lys Leu Glu Cys Leu Val Gln Leu Val Arg Ala
 65 70 75 80

Gly Ala Thr Leu Asn Val Ser Thr Thr Arg Tyr Ala Gln Thr Pro Ala
 85 90 95

His Ile Ala Ala Phe Gly Gly His Pro Gln Cys Leu Val Trp Leu Ile
 100 105 110

Gln Ala Gly Ala Asn Ile Asn Lys Pro Asp Cys Glu Gly Glu Thr Pro
 115 120 125

Ile His Lys Ala Ala Arg Ser Gly Ser Leu Glu Cys Ile Ser Ala Leu
 130 135 140

Val Ala Asn Gly Ala His Val Asp Leu Arg Asn Ala Ser Gly Leu Thr
 145 150 155 160

Ala Ala Asp Ile Ala Gln Thr Gln Gly Phe Gln Glu Cys Ala Gln Phe
 165 170 175

322

Leu Leu Asn Leu Gln Asn Cys His Leu Asn His Phe Tyr Asn Asn Gly
 180 185 190

Ile Leu Asn Gly Gly His Gln Asn Val Phe Pro Asn His Ile Ser Val
 195 200 205

Gly Thr Asn Arg Lys Arg Cys Leu Glu Asp Ser Glu Asp Phe Gly Val
 210 215 220

Lys Lys Ala Arg Thr Glu Ala Gln Ser Leu Asp Ser Ala Val Pro Leu
 225 230 235 240

Thr Asn Gly Asp Thr Glu Asp Asp Ala Asp Lys Met His Val Asp Arg
 245 250 255

Glu Phe Ala Val Val Thr Gly Gly Ser Gly Gln Phe Pro Val Ser Cys
 260 265 270

Asn Asn Asn Pro Met Val Glu Asp Thr Lys Gln Gln Glu Ser Gly Ser
 275 280 285

Val Gly Pro Lys Glu Ile Glu Ile Tyr Thr Val Ser Ala Met Gln Thr
 290 295 300

Pro Cys Arg Cys Arg Asn Gln Tyr Glu Lys Gln
 305 310 315

<210> 250

<211> 142

<212> PRT

<213> Homo sapien

<400> 250

Met Gly Asn Phe Lys Ser Ile Ser Thr Ser Thr Lys Met Val Asn Gly
 1 5 10 15

Arg Lys Ile Thr Thr Lys Arg Ile Val Glu Asn Gly Gln Glu Arg Val
 20 25 30

Glu Val Glu Glu Asp Gly Gln Leu Lys Ser Leu Thr Ile Asn Gly Val
 35 40 45

Ala Asp Asp Asp Ala Leu Ala Glu Glu Arg Met Arg Arg Gly Gln Asn
 50 55 60

Ala Leu Pro Ala Gln Pro Ala Gly Leu Arg Pro Pro Lys Pro Pro Arg
 65 70 75 80

323

Pro Ala Ser Leu Leu Arg His Ala Pro His Cys Leu Ser Glu Glu Glu
85 90 95

Gly Glu Gln Asp Arg Pro Arg Ala Pro Gly Pro Trp Asp Pro Leu Ala
100 105 110

Ser Ala Ala Gly Leu Lys Glu Gly Gly Lys Arg Lys Lys Gln Lys Gln
115 120 125

Arg Glu Glu Ser Lys Lys Lys Lys Ser Thr Lys Gly Asn His
130 135 140

<210> 251
<211> 72
<212> PRT
<213> Homo sapien

<400> 251

Met Gly Leu Ser His Ala Gly Trp His Arg Ala Gly Lys His Glu Ala
1 5 10 15

Ser Pro His Gln Gly Phe Ala Cys Arg Lys Ala Ala Leu Trp Pro Ala
20 25 30

Gly Glu Ala Glu Glu Thr Pro Val Asp Thr Leu Pro Thr Gly Leu Lys
35 40 45

Glu Gly Gly Lys Arg Lys Lys Gln Lys Gln Arg Glu Glu Ser Lys Lys
50 55 60

Lys Lys Ser Thr Lys Gly Asn His
65 70

<210> 252
<211> 122
<212> PRT
<213> Homo sapien

<400> 252

Thr Gly Leu Glu Ala Arg Gly Ala Pro Pro Asp Ala Gly Ala Pro Pro
1 5 10 15

Cys Ser Ala Cys Gly Arg Ala His Ala Leu Gly Ser Ser Val Gly Gln
20 25 30

Asp Cys Leu Glu Ala Thr Leu Ala Arg Gln Asp Tyr Ala Ile Thr Asp

324

35

40

45

Gln Ser Glu Gln Gly Gln Glu Thr Gly Leu Thr Ala Arg Val Ala Gly
 50 55 60

Thr Asp Val Trp Asp Leu Ala Ala Thr Leu Cys Phe Ser Pro Ala Leu
 65 70 75 80

Asn Leu Leu His Phe Pro Leu Val Leu Pro Asp Pro Leu His Ser Phe
 85 90 95

Arg Leu Leu Asn His Ser Ala Cys Cys Trp Asn Ile Ser Gly Phe Arg
 100 105 110

Ser Thr Gly Gly Arg Arg Trp Leu Thr Glu
 115 120

<210> 253

<211> 42

<212> PRT

<213> Homo sapien

<400> 253

Met Ala Lys Lys Ala Gly Leu Cys Leu Gly Gly Ser Arg Gln Gly Gly
 1 5 10 15

Cys Gln Ser Gly Met Val Thr Gly Asn Glu Pro Arg Asp Leu Ala Leu
 20 25 30

Ser His Pro Leu Ser Phe Val Gly Gly Leu
 35 40

<210> 254

<211> 260

<212> PRT

<213> Homo sapien

<400> 254

Val Phe Cys Ser Phe Phe Ala Glu Lys Glu Gln Gln Glu Ala Ile Glu
 1 5 10 15

His Ile Asp Glu Val Gln Asn Glu Ile Asp Arg Leu Asn Glu Gln Ala
 20 25 30

Ser Glu Glu Ile Leu Lys Val Glu Gln Lys Tyr Asn Lys Leu Arg Gln
 35 40 45

325

Pro Phe Phe Gln Lys Arg Ser Glu Leu Ile Ala Lys Ile Pro Asn Phe
 50 55 60

Trp Val Thr Thr Phe Val Asn His Pro Gln Val Ser Ala Leu Leu Gly
 65 70 75 80

Glu Glu Asp Glu Glu Ala Leu His Tyr Leu Thr Arg Val Glu Val Thr
 85 90 95

Glu Phe Glu Asp Ile Lys Ser Gly Tyr Arg Ile Asp Phe Tyr Phe Asp
 100 105 110

Glu Asn Pro Tyr Phe Glu Asn Lys Val Leu Ser Lys Glu Phe His Leu
 115 120 125

Asn Glu Ser Gly Asp Pro Ser Ser Lys Ser Thr Glu Ile Lys Trp Lys
 130 135 140

Ser Gly Lys Asp Leu Thr Lys Arg Ser Ser Gln Thr Gln Asn Lys Ala
 145 150 155 160

Ser Arg Lys Arg Gln His Glu Glu Pro Glu Ser Phe Phe Thr Trp Phe
 165 170 175

Thr Asp His Ser Asp Ala Gly Ala Asp Glu Leu Gly Glu Val Ile Lys
 180 185 190

Asp Asp Ile Trp Pro Asn Pro Leu Gln Tyr Tyr Leu Val Pro Asp Met
 195 200 205

Asp Asp Glu Glu Gly Glu Gly Glu Glu Asp Asp Asp Asp Glu Glu
 210 215 220

Glu Glu Gly Leu Glu Asp Ile Asp Glu Glu Gly Asp Glu Asp Glu Gly
 225 230 235 240

Glu Glu Asp Glu Asp Asp Asp Glu Gly Glu Glu Gly Glu Glu Asp Glu
 245 250 255

Gly Glu Asp Asp
 260

<210> 255

<211> 285

<212> PRT

<213> Homo sapien

326

<400> 255

Ser Leu Gln Asp Lys Arg Ala Pro Ile Pro Glu His Thr Pro Phe Ser
 1 5 10 15

Ser Ser Pro Phe Cys Ala Ser Leu Leu Ser Asp Leu Ile Val Ala Pro
 20 25 30

Lys Lys Glu Gln Gln Glu Ala Ile Glu His Ile Asp Glu Val Gln Asn
 35 40 45

Glu Ile Asp Arg Leu Asn Glu Gln Ala Ser Glu Glu Ile Leu Lys Val
 50 55 60

Glu Gln Lys Tyr Asn Lys Leu Arg Gln Pro Phe Phe Gln Lys Arg Ser
 65 70 75 80

Glu Leu Ile Ala Lys Ile Pro Asn Phe Trp Val Thr Thr Phe Val Asn
 85 90 95

His Pro Gln Val Ser Ala Leu Leu Gly Glu Glu Asp Glu Glu Ala Leu
 100 105 110

His Tyr Leu Thr Arg Val Glu Val Thr Glu Phe Glu Asp Ile Lys Ser
 115 120 125

Gly Tyr Arg Ile Asp Phe Tyr Phe Asp Glu Asn Pro Tyr Phe Glu Asn
 130 135 140

Lys Val Leu Ser Lys Glu Phe His Leu Asn Glu Ser Gly Asp Pro Ser
 145 150 155 160

Ser Lys Ser Thr Glu Ile Lys Trp Lys Ser Gly Lys Asp Leu Thr Lys
 165 170 175

Arg Ser Ser Gln Thr Gln Asn Lys Ala Ser Arg Lys Arg Gln His Glu
 180 185 190

Glu Pro Glu Ser Phe Phe Thr Trp Phe Thr Asp His Ser Asp Ala Gly
 195 200 205

Ala Asp Glu Leu Gly Glu Val Ile Lys Asp Asp Ile Trp Pro Asn Pro
 210 215 220

Leu Gln Tyr Tyr Leu Val Pro Asp Met Asp Asp Glu Glu Gly Glu Gly
 225 230 235 240

327

Glu Glu Asp Asp Asp Asp Asp Glu Glu Glu Glu Gly Leu Glu Asp Ile
 245 250 255

Asp Glu Glu Gly Asp Glu Asp Glu Gly Glu Glu Asp Glu Asp Asp Asp
 260 265 270

Glu Gly Glu Glu Gly Glu Glu Asp Glu Gly Glu Asp Asp
 275 280 285

<210> 256
 <211> 600
 <212> PRT
 <213> Homo sapien

<400> 256

Met Ala Thr Pro Leu Pro Gly Arg Ala Gly Gly Pro Ala Thr Pro Leu
 1 5 10 15

Ser Pro Thr Arg Leu Ser Arg Leu Gln Glu Lys Glu Glu Leu Arg Glu
 20 25 30

Leu Asn Asp Arg Leu Ala His Tyr Ile Asp Arg Val Arg Ala Leu Glu
 35 40 45

Leu Glu Asn Asp Arg Leu Leu Leu Lys Ile Ser Glu Lys Glu Glu Val
 50 55 60

Thr Thr Arg Glu Val Ser Gly Ile Lys Ala Leu Tyr Glu Ser Glu Leu
 65 70 75 80

Ala Asp Ala Arg Arg Val Leu Asp Glu Thr Ala Arg Glu Arg Ala Arg
 85 90 95

Leu Gln Ile Glu Ile Gly Lys Leu Arg Ala Glu Leu Asp Glu Val Asn
 100 105 110

Lys Ser Ala Lys Lys Arg Glu Gly Glu Leu Thr Val Ala Gln Gly Arg
 115 120 125

Val Lys Asp Leu Glu Ser Leu Phe His Arg Ser Glu Val Glu Leu Ala
 130 135 140

Ala Ala Leu Ser Asp Lys Arg Gly Leu Glu Ser Asp Val Ala Glu Leu
 145 150 155 160

Arg Ala Gln Leu Ala Lys Ala Glu Asp Gly His Ala Val Ala Lys Lys

328

165

170

175

Gln Leu Glu Lys Glu Thr Leu Met Arg Val Asp Leu Glu Asn Arg Cys
 180 185 190

Gln Ser Leu Gln Glu Glu Leu Asp Phe Arg Lys Ser Val Phe Glu Glu
 195 200 205

Glu Val Arg Glu Thr Arg Arg Arg His Glu Arg Arg Leu Val Glu Val
 210 215 220

Asp Ser Ser Arg Gln Gln Glu Tyr Asp Phe Lys Met Ala Gln Ala Leu
 225 230 235 240

Glu Glu Leu Arg Ser Gln His Asp Glu Gln Val Arg Leu Tyr Lys Leu
 245 250 255

Glu Leu Glu Gln Thr Tyr Gln Ala Lys Leu Asp Ser Ala Lys Leu Ser
 260 265 270

Ser Asp Gln Asn Asp Lys Ala Ala Ser Ala Ala Arg Glu Glu Leu Lys
 275 280 285

Glu Ala Arg Met Arg Leu Glu Ser Leu Ser Tyr Gln Leu Ser Gly Leu
 290 295 300

Gln Lys Gln Ala Ser Ala Ala Glu Asp Arg Ile Arg Glu Leu Glu Glu
 305 310 315 320

Ala Met Ala Gly Glu Arg Asp Lys Phe Arg Lys Met Leu Asp Ala Lys
 325 330 335

Glu Gln Glu Met Thr Glu Met Arg Asp Val Met Gln Gln Gln Leu Ala
 340 345 350

Glu Tyr Gln Glu Leu Leu Asp Val Lys Leu Ala Leu Asp Met Glu Ile
 355 360 365

Asn Ala Tyr Arg Lys Leu Leu Glu Gly Glu Glu Glu Arg Leu Lys Leu
 370 375 380

Ser Pro Ser Pro Ser Ser Arg Val Thr Val Ser Arg Ala Thr Ser Ser
 385 390 395 400

Ser Ser Gly Ser Leu Ser Ala Thr Gly Arg Leu Gly Arg Ser Lys Arg
 405 410 415

329

Lys Arg Leu Glu Val Glu Glu Pro Leu Gly Ser Gly Pro Ser Val Leu
 420 425 430

Gly Thr Gly Thr Gly Gly Ser Gly Gly Phe His Leu Ala Gln Gln Ala
 435 440 445

Ser Ala Ser Gly Ser Val Ser Ile Glu Glu Ile Asp Leu Glu Gly Lys
 450 455 460

Phe Val Gln Leu Lys Asn Asn Ser Asp Lys Asp Gln Ser Leu Gly Asn
 465 470 475 480

Trp Arg Ile Lys Arg Gln Val Leu Glu Gly Glu Glu Ile Ala Tyr Lys
 485 490 495

Phe Thr Pro Lys Tyr Ile Leu Arg Ala Gly Gln Met Val Thr Val Trp
 500 505 510

Ala Ala Gly Ala Gly Val Ala His Ser Pro Pro Ser Thr Leu Val Trp
 515 520 525

Lys Gly Gln Ser Ser Trp Gly Thr Gly Glu Ser Phe Arg Thr Val Leu
 530 535 540

Val Asn Ala Asp Gly Glu Glu Val Ala Met Arg Thr Val Lys Lys Ser
 545 550 555 560

Ser Val Met Arg Glu Asn Glu Asn Gly Glu Glu Glu Glu Glu Ala
 565 570 575

Glu Phe Gly Glu Glu Asp Leu Phe His Gln Gln Gly Asp Pro Arg Thr
 580 585 590

Thr Ser Arg Gly Cys Tyr Val Met
 595 600

<210> 257
 <211> 620
 <212> PRT
 <213> Homo sapien

<400> 257

Met Ser Pro Pro Ser Pro Gly Arg Arg Arg Glu Gln Arg Arg Pro Arg
 1 5 10 15

330

Ala Ala Ala Thr Met Ala Thr Pro Leu Pro Gly Arg Ala Gly Gly Pro
 20 25 30

Ala Thr Pro Leu Ser Pro Thr Arg Leu Ser Arg Leu Gln Glu Lys Glu
 35 40 45

Glu Leu Arg Glu Leu Asn Asp Arg Leu Ala His Tyr Ile Asp Arg Val
 50 55 60

Arg Ala Leu Glu Leu Glu Asn Asp Arg Leu Leu Leu Lys Ile Ser Glu
 65 70 75 80

Lys Glu Glu Val Thr Thr Arg Glu Val Ser Gly Ile Lys Ala Leu Tyr
 85 90 95

Glu Ser Glu Leu Ala Asp Ala Arg Arg Val Leu Asp Glu Thr Ala Arg
 100 105 110

Glu Arg Ala Arg Leu Gln Ile Glu Ile Gly Lys Leu Arg Ala Glu Leu
 115 120 125

Asp Glu Val Asn Lys Ser Ala Lys Lys Arg Glu Gly Glu Leu Thr Val
 130 135 140

Ala Gln Gly Arg Val Lys Asp Leu Glu Ser Leu Phe His Arg Ser Glu
 145 150 155 160

Val Glu Leu Ala Ala Ala Leu Ser Asp Lys Arg Gly Leu Glu Ser Asp
 165 170 175

Val Ala Glu Leu Arg Ala Gln Leu Ala Lys Ala Glu Asp Gly His Ala
 180 185 190

Val Ala Lys Lys Gln Leu Glu Lys Glu Thr Leu Met Arg Val Asp Leu
 195 200 205

Glu Asn Arg Cys Gln Ser Leu Gln Glu Glu Leu Asp Phe Arg Lys Ser
 210 215 220

Val Phe Glu Glu Glu Val Arg Glu Thr Arg Arg Arg His Glu Arg Arg
 225 230 235 240

Leu Val Glu Val Asp Ser Ser Arg Gln Gln Glu Tyr Asp Phe Lys Met
 245 250 255

Ala Gln Ala Leu Glu Glu Leu Arg Ser Gln His Asp Glu Gln Val Arg

331

260

265

270

Leu Tyr Lys Leu Glu Leu Glu Gln Thr Tyr Gln Ala Lys Leu Asp Ser
 275 280 285

Ala Lys Leu Ser Ser Asp Gln Asn Asp Lys Ala Ala Ser Ala Ala Arg
 290 295 300

Glu Glu Leu Lys Glu Ala Arg Met Arg Leu Glu Ser Leu Ser Tyr Gln
 305 310 315 320

Leu Ser Gly Leu Gln Lys Gln Ala Ser Ala Ala Glu Asp Arg Ile Arg
 325 330 335

Glu Leu Glu Glu Ala Met Ala Gly Glu Arg Asp Lys Phe Arg Lys Met
 340 345 350

Leu Asp Ala Lys Glu Gln Glu Met Thr Glu Met Arg Asp Val Met Gln
 355 360 365

Gln Gln Leu Ala Glu Tyr Gln Glu Leu Leu Asp Val Lys Leu Ala Leu
 370 375 380

Asp Met Glu Ile Asn Ala Tyr Arg Lys Leu Leu Glu Gly Glu Glu Glu
 385 390 395 400

Arg Leu Lys Leu Ser Pro Ser Pro Ser Ser Arg Val Thr Val Ser Arg
 405 410 415

Ala Thr Ser Ser Ser Ser Gly Ser Leu Ser Ala Thr Gly Arg Leu Gly
 420 425 430

Arg Ser Lys Arg Lys Arg Leu Glu Val Glu Glu Pro Leu Gly Ser Gly
 435 440 445

Pro Ser Val Leu Gly Thr Gly Thr Gly Gly Ser Gly Gly Phe His Leu
 450 455 460

Ala Gln Gln Ala Ser Ala Ser Gly Ser Val Ser Ile Glu Glu Ile Asp
 465 470 475 480

Leu Glu Gly Lys Phe Val Gln Leu Lys Asn Asn Ser Asp Lys Asp Gln
 485 490 495

Ser Leu Gly Asn Trp Arg Ile Lys Arg Gln Val Leu Glu Gly Glu Glu
 500 505 510

332

Ile Ala Tyr Lys Phe Thr Pro Lys Tyr Ile Leu Arg Ala Gly Gln Met
 515 520 525

Val Thr Val Trp Ala Ala Gly Ala Gly Val Ala His Ser Pro Pro Ser
 530 535 540

Thr Leu Val Trp Lys Gly Gln Ser Ser Trp Gly Thr Gly Glu Ser Phe
 545 550 555 560

Arg Thr Val Leu Val Asn Ala Asp Gly Glu Glu Val Ala Met Arg Thr
 565 570 575

Val Lys Lys Ser Ser Val Met Arg Glu Asn Glu Asn Gly Glu Glu Glu
 580 585 590

Glu Glu Glu Ala Glu Phe Gly Glu Glu Asp Leu Phe His Gln Gln Gly
 595 600 605

Asp Pro Arg Thr Thr Ser Arg Gly Cys Tyr Val Met
 610 615 620

<210> 258

<211> 237

<212> PRT

<213> Homo sapien

<400> 258

Met Ser Pro Pro Ser Pro Gly Arg Arg Arg Glu Gln Arg Arg Pro Arg
 1 5 10 15

Ala Ala Ala Thr Met Ala Thr Pro Leu Pro Gly Arg Ala Gly Gly Pro
 20 25 30

Ala Thr Pro Leu Ser Pro Thr Arg Leu Ser Arg Leu Gln Glu Lys Glu
 35 40 45

Glu Leu Arg Glu Leu Asn Asp Arg Leu Ala His Tyr Ile Asp Arg Val
 50 55 60

Arg Ala Leu Glu Leu Glu Asn Asp Arg Leu Leu Leu Lys Ile Ser Glu
 65 70 75 80

Lys Glu Glu Val Thr Thr Arg Glu Val Ser Gly Ile Lys Ala Leu Tyr
 85 90 95

333

Glu Ser Glu Leu Ala Asp Ala Arg Arg Val Leu Asp Glu Thr Ala Arg
 100 105 110

Glu Arg Ala Arg Leu Gln Ile Glu Ile Gly Lys Leu Arg Ala Glu Leu
 115 120 125

Asp Glu Val Asn Lys Ser Ala Lys Lys Arg Glu Gly Glu Leu Thr Val
 130 135 140

Ala Gln Gly Arg Val Lys Asp Leu Glu Ser Leu Phe His Arg Ser Glu
 145 150 155 160

Val Glu Leu Ala Ala Ala Leu Ser Asp Lys Arg Gly Leu Glu Ser Asp
 165 170 175

Val Ala Glu Leu Arg Ala Gln Leu Ala Lys Ala Glu Asp Gly His Ala
 180 185 190

Val Ala Lys Lys Gln Leu Glu Lys Gly Cys Pro Cys Ser Gln Lys Ser
 195 200 205

Arg Ser His Val Asp Arg Gly Gly Arg Ile Leu Pro Lys His Phe Leu
 210 215 220

Leu Glu Ala Thr Pro Leu Cys Ser Gln Ser Gly Gly Trp
 225 230 235

<210> 259
 <211> 620
 <212> PRT
 <213> Homo sapien

<400> 259

Met Ser Pro Pro Ser Pro Gly Arg Arg Arg Glu Gln Arg Arg Pro Arg
 1 5 10 15

Ala Ala Ala Thr Met Ala Thr Pro Leu Pro Gly Arg Ala Gly Gly Pro
 20 25 30

Ala Thr Pro Leu Ser Pro Thr Arg Leu Ser Arg Leu Gln Glu Lys Glu
 35 40 45

Glu Leu Arg Glu Leu Asn Asp Arg Leu Ala His Tyr Ile Asp Arg Val
 50 55 60

Arg Ala Leu Glu Leu Glu Asn Asp Arg Leu Leu Leu Lys Ile Ser Glu
 65 70 75 80

334

Lys Glu Glu Val Thr Thr Arg Glu Val Ser Gly Ile Lys Ala Leu Tyr
85 90 95

Glu Ser Glu Leu Ala Asp Ala Arg Arg Val Leu Asp Glu Thr Ala Arg
100 105 110

Glu Arg Ala Arg Leu Gln Ile Glu Ile Gly Lys Leu Arg Ala Glu Leu
115 120 125

Asp Glu Val Asn Lys Ser Ala Lys Lys Arg Glu Gly Glu Leu Thr Val
130 135 140

Ala Gln Gly Arg Val Lys Asp Leu Glu Ser Leu Phe His Arg Ser Glu
145 150 155 160

Val Glu Leu Ala Ala Ala Leu Ser Asp Lys Arg Gly Leu Glu Ser Asp
165 170 175

Val Ala Glu Leu Arg Ala Gln Leu Ala Lys Ala Glu Asp Gly His Ala
180 185 190

Val Ala Lys Lys Gln Leu Glu Lys Glu Thr Leu Met Arg Val Asp Leu
195 200 205

Glu Asn Arg Cys Gln Ser Leu Gln Glu Glu Leu Asp Phe Arg Lys Ser
210 215 220

Val Phe Glu Glu Glu Val Arg Glu Thr Arg Arg Arg His Glu Arg Arg
225 230 235 240

Leu Val Glu Val Asp Ser Ser Arg Gln Gln Glu Tyr Asp Phe Lys Met
245 250 255

Ala Gln Ala Leu Glu Glu Leu Arg Ser Gln His Asp Glu Gln Val Arg
260 265 270

Leu Tyr Lys Leu Glu Leu Glu Gln Thr Tyr Gln Ala Lys Leu Asp Ser
275 280 285

Ala Lys Leu Ser Ser Asp Gln Asn Asp Lys Ala Ala Ser Ala Ala Arg
290 295 300

Glu Glu Leu Lys Glu Ala Arg Met Arg Leu Glu Ser Leu Ser Tyr Gln
305 310 315 320

335

Leu Ser Gly Leu Gln Lys Gln Ala Ser Ala Ala Glu Asp Arg Ile Arg
 325 330 335

Glu Leu Glu Glu Ala Met Ala Gly Glu Arg Asp Lys Phe Arg Lys Met
 340 345 350

Leu Asp Ala Lys Glu Gln Glu Met Thr Glu Met Arg Asp Val Met Gln
 355 360 365

Gln Gln Leu Ala Glu Tyr Gln Glu Leu Leu Asp Val Lys Leu Ala Leu
 370 375 380

Asp Met Glu Ile Asn Ala Tyr Arg Lys Leu Leu Glu Gly Glu Glu Glu
 385 390 395 400

Arg Leu Lys Leu Ser Pro Ser Pro Ser Ser Arg Val Thr Val Ser Arg
 405 410 415

Ala Thr Ser Ser Ser Ser Gly Ser Leu Ser Ala Thr Gly Arg Leu Gly
 420 425 430

Arg Ser Lys Arg Lys Arg Leu Glu Val Glu Glu Pro Leu Gly Ser Gly
 435 440 445

Pro Ser Val Leu Gly Thr Gly Thr Gly Gly Ser Gly Gly Phe His Leu
 450 455 460

Ala Gln Gln Ala Ser Ala Ser Gly Ser Val Ser Ile Glu Glu Ile Asp
 465 470 475 480

Leu Glu Gly Lys Phe Val Gln Leu Lys Asn Asn Ser Asp Lys Asp Gln
 485 490 495

Ser Leu Gly Asn Trp Arg Ile Lys Arg Gln Val Leu Glu Gly Glu Glu
 500 505 510

Ile Ala Tyr Lys Phe Thr Pro Lys Tyr Ile Leu Arg Ala Gly Gln Met
 515 520 525

Val Thr Val Trp Ala Ala Gly Ala Gly Val Ala His Ser Pro Pro Ser
 530 535 540

Thr Leu Val Trp Lys Gly Gln Ser Ser Trp Gly Thr Gly Glu Ser Phe
 545 550 555 560

336

Arg Thr Val Leu Val Asn Ala Asp Gly Glu Glu Val Ala Met Arg Thr
565 570 575

Val Lys Lys Ser Ser Val Met Arg Glu Asn Glu Asn Gly Glu Glu Glu
580 585 590

Glu Glu Glu Ala Glu Phe Gly Glu Glu Asp Leu Phe His Gln Gln Gly
595 600 605

Asp Pro Arg Thr Thr Ser Arg Gly Cys Tyr Val Met
610 615 620